A study of the economic and social factors in foreign direct investment into Pakistan

A Study of the Economic and Social Factors in Foreign Direct Investment into Pakistan

by

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Abstract

In the present era most developing countries and Pakistan in particular are attempting to come up with better economic and financial policies as well as more stable governments to enhance the prospects of their economies. Pakistan is trying to encourage foreign investment through more liberal economic policies, political stability and the maintenance of law and order.

The principal aim of this study is to evaluate the influence of the principal macro-economic variables in attracting FDI to Pakistan. One of the principal contributions of this study is to include political instability as a potential risk factor in determining the level of FDI in Pakistan. As part of this contribution is the construction of political risk indices drawing on economic and political chronological events in the country for the period of 1970-2004.

The empirical analysis indicates that an improvement in the health of economy by raising per capita income, lower interest rates (discount rates), and more stable exchange rate, along with a stable political environment can affect the short-term flows of FDI and the long-run level of FDI. The policy implications are that in Pakistan policy makers in future must take into account a wide range of economic and non-economic factors in determining their policies towards FDI.

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Finally my thanks to my family parents and specially my wife, whose love and encouragement continue to support all my endeavors.

Abbreviations

ADB	Asian Development Bank (ADB).
ADF	Augmented Dickey and Fuller
ADB	Asian Development Bank
ARDL	Auto regressive distributive lag model
ASEAN	Association of Southeast Asian Nations
BOI	Board of Investment
DNSC	Defence and National Security Council
ECC	Economic Co-ordination Committee
ECM	Error correction model
EPB	Export Promotion Bureau
EU	European Union
FDI	Foreign Direct Investment
FSF	Federal Security Force
GDP	Gross Domestic Product
GDPC	Gross Domestic product per capita
GOP	Government of Pakistan
GST	General Sales Tax
ICRG	International country risk guide
IDB	Islamic Development Bank
IFS	International Financial Statistics
IJI	Islami Jumhoori Ittehad
IMF	International Monetary Fund
IPB	Investment Promotion Bureau
IPP	Independent Power Producer
JI	Jamat-e-Islami
LFO	Legal Framework Order
MNC	Multi National Corporation
MNE	Multi National Enterprise
MRD	Movement for Restoration of Democracy
MQM	Mahajir Qaumi Movement

MNA	Member National Assembly
MPA	Member Provincial Assembly
NAB	National Accountability Beaurue
NOC	No Objection Certificate
NPP	National Power Plan
OIC	Organisation of Islamic Countries
PCO	Provisional Constitutional Order
ORI	Operation Risk Index
PLS	Profit and Loss Sharing
PP	Phillips and Perron
PPP	Pakistan People's Party
PRs	Pakistan Rupee
PRI	Political Risk Index
PSP	Profit Sharing Principle
SBP	State Bank of Pakistan
TNC	Trans National Corporation
UNCTAD	United Nations Conference on Trade and Development
UNESCO	United Nations Economic and Social Cooperation Organiosation
USAID	United States Agency for International Development
WAPDA	Water & Power Development Authority
WDL	Work Days Lost
WTO	World Trade Organisation

Glossary (Islamic Terms)

al-kharaj bi *al-daman*	A financing contract which relates the entitlement to the return on an asset to bearing the risks resulting from its possession.
bai' al-istisna'	A contract of acquisition of goods by specification or order, where the price is paid in advance, but the goods are manufactured and delivered at later date
bai' al-salam'	A contract of sale of goods where the price is paid in advance and the goods are delivered in future.
bai' bithaman'ajil	This contract refers to the sale of goods on deferred basis. It is similar to murabahah contract.
dayn	Literally means debt (loan).
gharar	The root word of ghrr denotes description. Bay' al-gharar is an exchange in which there is an element of deception either through ignorance of goods, the price, or through faulty decription of goods.
ijarah	a contract under which a financial institution purchases and leases out equipment required by client for a rental fee. The duration of the lease and rental fees are agreed in advance. The ownership rights remain with the financial institution.
mudharabah	An agreement made between two parties: one party provides capital and the other provides management skills. The ratio of sharing profit is agreed in advance. The losses are borne by the capital provider (appendix 3.1:46).
murabahah	The financial institution buys equipment on behalf of client and sells it to the client on an agreed profit margin and repayment in installments agreed in advance(appendix 3.1:46).
musharakah	A partnership contract in which both parties provide capital and management skills with an agreed profit / loss sharing ratios in advance. It is a form of joint venture investment (appendix 3.1:46).
riba	Literally means and increase or addition. Technically it denotes in a loan transaction, any increase or advantage obtained by the lender as a

	condition of the loan. In a commodity exchange it denotes any disparity in the quantity or time of delivery.
shari'ah	Literally, the sari'ah means "the path to water"- the source of all life, the clear to be followed and the path which the believer has to tread in order to obtain guidance in this world and the deliverance in the next. Technically, it means a set of norms, values and laws that govern Muslim's lives.
shirkat-e-mufawadha	Equal partnership contracts where capital, profit and loss are shared equally (a type of musharakah).
shirkat-alinan	Unequal partnership contracts where any party can participate with any proportion (a type of musharakah).
shirkat-e-sanai	This is a form of general partnership business. This partnership is formed on the basis of labour, skill and management. This is also called Shirkat-as-abdan(partnership in crafts or art), Shirkat-al-Amal(on the basis of work) and Shirkat-at-Taqabbul(partnership in contracting) (a type of musharakah).
shirkat-e-wujooh	Goodwill-based partnership or credit partnership where business is conducted on the basis of goodwill and goods and commodities are hired on credit (a type of musharakah).
shirkat-al-Melk	It divided into two parts : (a) Shirkat-al-Melk Bil Ekhtiar or voluntary partnership; and (b) Shirkat-al-Melk Bil Zabir or involuntary partnership (a type of musharakah).
zahat	Alms-giving. Literally it means purification of wealth. Technically, it is a taxation system according to sharia'h rules followed by Muslims.

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Chapter 1

Introduction

At the outset of the twenty-first century, most developing countries and Pakistan in particular, are struggling to improve the performance of their economies through self-reliance and less dependence on foreign aid. One aspect of this policy is to encourage foreign investment inflows through more liberal economic policies, political stability and strict law and order, to build the confidence of the foreign investors in the potential host economies. It is obvious that not only economic and political factors determine foreign direct investment [FDI] flows into a country, but there are other considerations that foreign investors take into account when making investment decisions concerning a specific country. Similarly, policy-makers in the host countries take into account a range of economic and non-economic factors while deciding their policies towards FDI. Therefore, keeping in view the international non-economic factors, this dissertation will look into the effect of the Islamisation of the economy on FDI inflows to Pakistan. Abolition of interest charges and payments from the economy has been the subject of an ongoing debate for decades in Pakistan. Some political observers and economists believe that if the government goes ahead with the proposed abolition of interest, it would have disastrous effects on the economy. However, this may lead to more FDI inflows to Pakistan, as these are not interest-based transactions, but investments which yield profits and which conform to the requirements of Islamic law. In the past, however, the process of Islamisation has added to political and economic uncertainty in Pakistan, which might have adversely affected the level of FDI inflows.

The empirical motivation of this thesis is to investigate through the use of quantitative time-series methods, the actual and potential effects of Islamisation and other economic and political factors on the level of FDI in Pakistan.

The developments in the world political and investment environment with the increased risks of political instability have made it important to investigate their relationship with FDI. It is a well-known fact that FDI is supply-determined and is determined by the decisions of multinational enterprises. This suggests that the relationship between political instability risk and FDI should be envisaged from the perspective of the

multinational enterprises. The relationship between political instability risk and FDI can also be seen from the perspective of the host countries.

The answer to the question, as to why FDI mostly happens between developed countries not between developed and developing countries in apparent contrast to the neoclassical growth model says that capital should flow from capital-rich countries to capital-poor countries to earn higher returns, can be found in the high political uncertainty in developing countries. Thus, if developing countries want to attract or retain more FDI, efforts should be made to increase the political stability in the country.

Along with the importance of the effects of international investment laws on the relationship between political instability risk and FDI, the role of the state in a globalizing world should be examined in the sense that the study of the risks from political instability could be an important feature of the relationship between politics and international economics. This understanding can help the host countries to look into the possibilities and limitations of their better political governance.

To analyse to what extent, and in what way, the rise of political instability could have affected FDI stock in the host country, it is worth noting how to shape the qualitative information on political instability risk to investigate its empirical relationship to FDI. Due to the controversial empirical status of political risk, it has been recognized as an additional determinant along with other macro-economic determinants of FDI flows, which could dampen FDI flows in the host-country.

In the light of Pakistan's economic history, the main purpose of this study is to examine the macro-economic determinants as well as the impact of political instability risk on the flow of FDI. More specifically, an empirical model will be presented, which will give an idea of the extent to which the macro economic variables, along with political risk index, affect the flow and the stock of FDI in Pakistan. More emphasis will be given to the political risk in Pakistan by constructing a political risk index for the period 1970-2004. There are numerous approaches used for the assessment of political risk including event-tree analysis, actuarial techniques or statistical decision theory. For the most part, a mixture of subjective and objective approaches dominates corporate

attempts to quantify and analyse the host country's political climate. The objective approach attaches importance to methodological and procedural solutions to the quantification of political risk. The objective approach could therefore be also referred to as the method approach. The second approach, known as the subjective approach, makes use of qualitative judgment and experience to predict the quantitative evolution of the political environment.

The economic liberalisation in Islamic law is only achieved through an ethical implementation of the moral values of Islam. The private and public sector interests are controlled through a moral value discipline of the market. The moral system provides a criterion for the equal distribution of justice, resources and economic benefits to every individual with the goal of social well-being. The Islamisation of the economic system is a complete switch over from the conventional system prevailing at present to the Islamic Laws. The political will is a necessary condition for the successful implementation of the rules and regulations governing the whole legal, monetary and fiscal system of the country (Chapra 2002).

Although much research has been done to show the importance of the Islamic Economic System for better resource allocation, income distribution, and stability and growth, still there is a lot to study, particularly for a country with an unstable political structure and a discouraging law and order situation, which is in the process of switching over from a conventional economic and financial system to a full Islamic financial system. Of course one can find many valuable examples of empirical work in the Islamic Economic literature, however, the effort will be made to develop a model for the specific issues of risk under the Islamic modes of investment i.e. equity-based investments (Yasin 1999).

Despite their better economic and stable political environment, the leading Muslim countries have not been able to establish a monolithic political, economic and social system. This study will serve as model for other Muslim countries to develop their system according to Sharia laws and implement these laws fully to achieve the best results from their investments[1].

[1] See Appendix-1.1, 1.2, & 1..3 (pages 216-222)

This thesis makes three principal contributions to the existing literature. It is the first attempt to provide a statistical analysis of FDI in Pakistan, distinguishing between flows and levels. This is potentially important because the levels are more important for the long-term development of the economy, while the flows are volatile and potentially reversible. A second contribution is the computation of political risk indices for Pakistan, which can be incorporated into an econometric model of the determinants of the level of FDI in Pakistan. The third principal contribution is to develop a macroeconomic model of FDI, incorporating political risk as an independent factor, *inter alia* with the other standard determinants of FDI, which is tested using time-series, cointegration techniques. This is also the first time-series analysis of FDI in Pakistan, since previous studies have used either cross-section or panel data analysis.

The thesis is structured as follows.

Chapter 2 presents a thorough statistical analysis of FDI flows and levels in Pakistan. This will provide the foundation for the time series analysis of FDI flows and will also provide an integrated review of economic and political events in Pakistan over the sample period and their effects on FDI inflows.

Chapter 3 outlines the traditional, theoretical motivations for foreign direct investment [FDI], drawing on the literature of international trade and portfolio investment. It also attempts to extend this analysis to include an analysis of Islamic economic and financial concepts of investment[2]. This analysis suggests that FDI is compatible with Islamic financial rules and regulations, since it does not involve the payment of interest.

In Chapter 4, while focusing upon country risk in general and political risk in particular, a review of different risks as an ingredient of political risk is analysed. In this chapter, along with a review of the risk rating of Pakistan for the sample period 1970-2004, the methodology of political risk indexation is explained and used to develop quantified risk indices for Pakistan that are used in later chapters[3].

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[2] See also Appndix-3.1 (page 55)
[3] See Appendix-4.2 (page 126) & Appendix-4.3 (page 136)

Chapter 5 provides a selective review of recent empirical studies of FDI in developing countries, along with some sample results, which have used the usual determinants of FDI like GDP, the openness of the economy, the interest rate, the exchange rate and the inflation rate, as well as political risk factors. These are the determinants which contribute to the development of the final model for Pakistan in Chapter 6.

Chapter 6 sets out an augmented neoclassical model of the macroeconomic determinants of FDI in Pakistan, including political risk, and discusses the methodological procedures to be used for the empirical testing of the model.

Chapter 7 employs ARDL cointegration estimation techniques to generate long-run and short-run dynamic versions of the specified model. This empirical examination shows that political risk is an important factor influencing inflows of FDI to Pakistan. This analysis is developed further by subjecting the political risk indices to sensitivity analysis, to see how responsive FDI is to changes in this level of risk. The forecasts of the FDI stock have also been derived and analysed through three different scenarios of political risk: the Best Case (BC), Most Probable Case (MP) and Worst Case (WC).

Chapter 8 concludes this study by summarizing the overall findings and the policy implications for an improved FDI environment that follow from the future prospects for economic and political stability. The concluding remarks are given along with the suggestions about the further scope for the use of this research. The final model for developing countries in general and Muslim countries in particular, is set out.

In this thesis, only primary, quantitative, time-series data has been used for most of the variables along with a secondary data approach for the calculation of the index of political risk from primary, qualitative information.

Chapter 2
FDI in Pakistan: A Statistical Analysis

2.1 Introduction

"Foreign direct investment (FDI) is defined as the category of international investment that reflects the objective of a resident entity in one economy (direct investor) of establishing a lasting interest in an enterprise (the direct investment enterprise) resident in another economy. A *direct investment enterprise* is defined as an incorporated or unincorporated enterprise in which a foreign investor owns 10% or more of the ordinary shares or voting power of an incorporated enterprise or the equivalent of an unincorporated enterprise" (IMF/ OECD/ UNCTAD 2003:231).

Foreign investment, especially direct investment by multinational firms (FDI), is believed to be a major contributor to economic growth for developing countries (Balasubramanyam, Salisu and Sapsford 1996).

FDI is considered desirable because it can add productive resources to a country, often bringing with it new technology and training for workers - as well as much-needed capital. FDI inflows represent the largest net resource flow into the developing countries (UNCTAD 2003:4). After many years of apprehension, developing countries have in recent years shown strong interest in attracting such investment, but multinational firms (MNCs) may be wary of placing their capital in such countries due to the economic and political instability (Vernon 1971).

As Froot (1993) noted, FDI (the purchase by a domestic resident of a controlling stake in a foreign company) actually requires neither capital flows nor investment in capacity. Conceptually, FDI is an extension of corporate control over international boundaries. Once the MNC undertakes a foreign direct investment, some bargaining power inevitably shifts to the host country because the investment is by definition not perfectly mobile and depends upon local property rights (Maskus, 1997). An additional feature of FDI flows is that the share of FDI in total inflows is higher in riskier countries, as measured either by countries' credit ratings for sovereign debt or other indicators of

country risk (see chart 2.1). There is also some evidence that the FDI share is higher in countries where the quality of corporate governance institutions is lower.

One explanation is that FDI is more likely, compared with other forms of capital flows, to take place in countries with missing or inefficient markets. In such settings, foreign investors will prefer to operate directly instead of relying on local financial markets, suppliers or legal arrangements (Razin 2002). Kindleberger (1969) suggested that, in order to think about FDI, we must ask not why capital might flow into a country, but rather why some particular asset would be worth more under foreign than under domestic control.

Given the competition for FDI among developing countries, countries wishing to attract inward FDI must therefore find ways to reassure private investors that their investments are secure and will prosper.

2.2 FDI Global Trends: Stocks and Flows

Foreign direct investment can be measured as a stock (or level) at a point in time or as a flow over time. These are equivalent to the domestic notion of the capital stock of the country and the flow of investment.

Foreign direct investment flows are made up of three basic components: first, equity capital comprising equity in branches, in subsidiaries and other capital contributions such as provisions of machinery. The second is reinvested earnings, consisting of the direct investors' share of earnings not distributed as dividends by subsidiaries or associates and earnings of branches not remitted to the direct investor. The third category of FDI flows can be defined as other direct investment capital covering the borrowing and lending of funds, including debt securities and trade credits, between direct investors and direct investment enterprises and between two direct investment enterprises that share the same direct investor (Falzoni 2000).

On the other hand, the FDI stock represents the direct investment position on a historical-cost basis, that is, the amount of investment already in the host country as opposed to the flow of capital into the host country in a given year. According to the

IMF (1993), the difference between the stock at the beginning of the year and its value at the year-end must be equal to the flow recorded in the Balance of Payments, which reflects the transactions on these assets or liabilities that actually took place; plus the change in the value of the stock induced by swings in the exchange rate; plus the change caused by alterations in the price of the related assets or liabilities; plus other changes in the volume of financial assets and liabilities as summarized below. If P_tS_t is the value of stock at the end of period t, then the change in the value is:

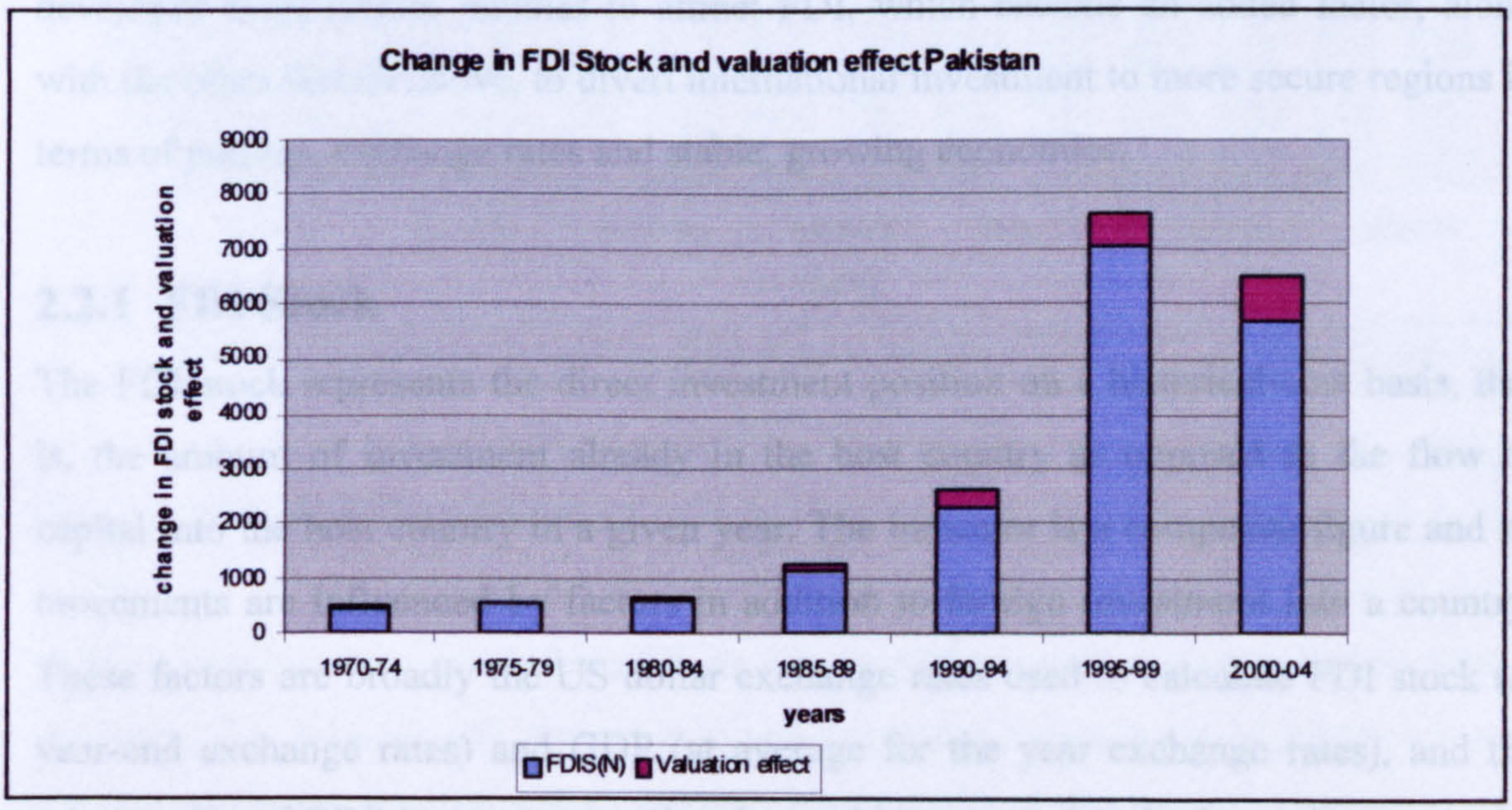
$$\Delta(P_tS_t) = S_t\Delta P_t + P_t\Delta S_t \qquad 2.1$$

where Δ is the first difference operator. The valuation effect can be divided between the exchange rate and the foreign price level so:

$$\Delta(P_tS_t) = S_t[\Delta EP^* + E\Delta P^*] + P_t\Delta S_t \qquad 2.2$$

where, $\Delta(P_tS_t)$ is the change in the nominal stock, $S_t[\Delta EP^* + E\Delta P^*]$ is the revaluation of existing stock due to exchange rate and price level changes, and $P_t\Delta S_t$ is the flow of new investment in period t. Chart 2.1 shows how this disaggregating change in the nominal FDI stock is apportioned between new flows and revaluations effects, with new

Chart-2.1



FDI flows predominant. Chart 2-1 also shows that there has been a generally positive trend in FDI inflows into Pakistan over the sample period. In the following sections,

these will be explained in relation to the FDI flows and stock around the globe in general and with those into Pakistan in particular.

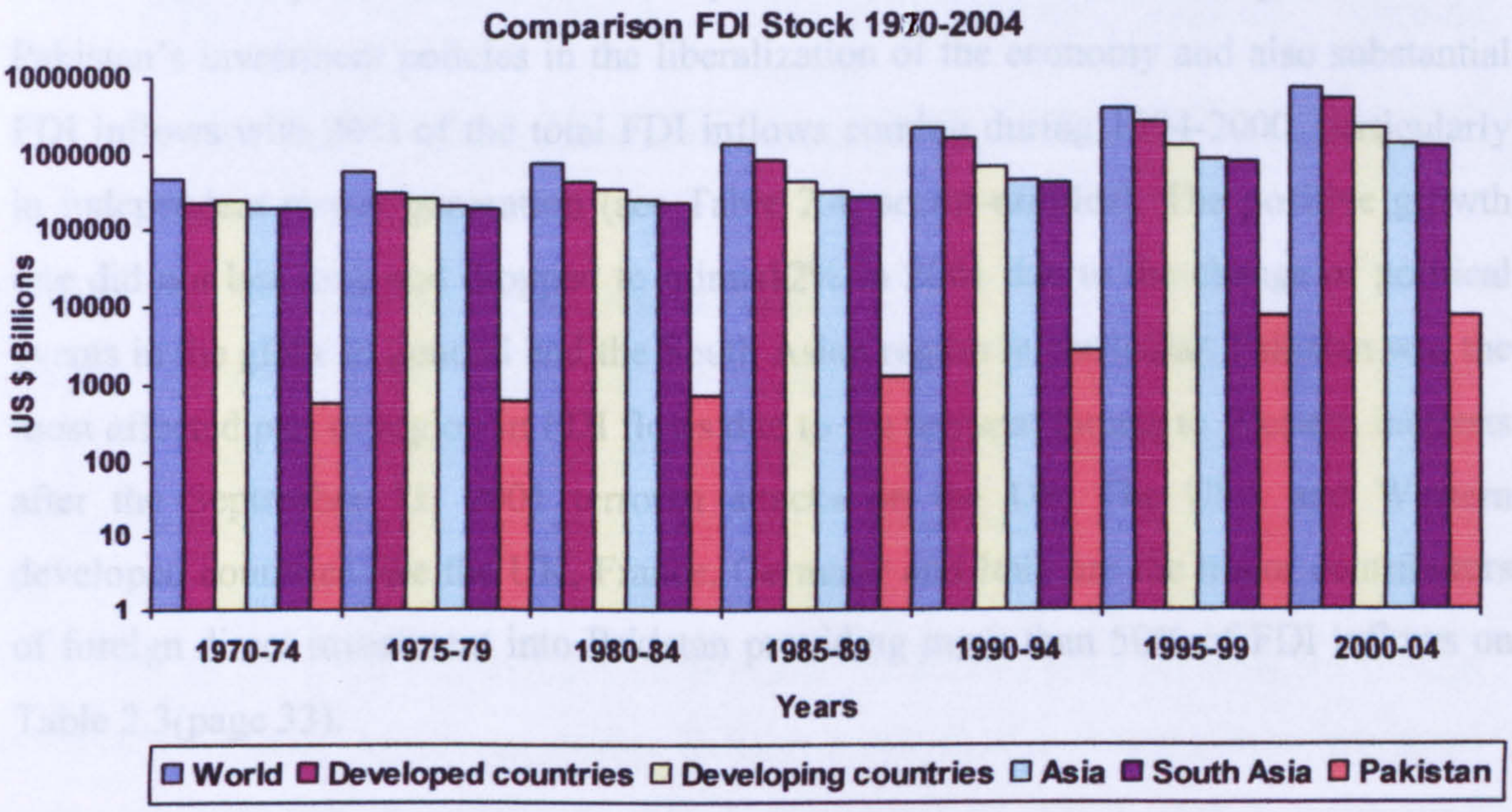
The FDI stock in Pakistan remained very volatile due to specific political factors and a volatile exchange rate. The re-valuation effects of a volatile exchange rate, however, did not seem to have any major effect on the stock of FDI, but the political instability and the major change in policies do seem to have important effects. The stock of FDI went down by 88% during 1981-85 due to the nationalization policy of the government in 1973 showing effects in the early 1980's. It again started building up after 1985 due to the new regime's privatisation policies after 1977 and grew up to 400% until 1996-2000 since, despite the changes in government; the major policies remained the same. The sharp rise in FDI stock in 1996-2000 was due to the foreign investment in controversial independent power-generation plants, which gave an indication of political corruption. The stock of FDI fell sharply by 73% during 2001-06 due to a number of different reasons including: the freezing of foreign currency accounts in 1988, the change in government through a military coup, the 9/11 terrorist activities in the USA, regional political factors and exchange rate volatility and the sharp rise in inflation (see Table 6.7). The region's growing economies like Bangladesh, Sri Lanka and Maldives also developed more liberal policies to attract FDI, which became an added factor, along with the other factors above, to divert international investment to more secure regions in terms of politics, exchange rates and stable, growing economies.

2.2.1 FDI Stock

The FDI stock represents the direct investment position on a historical-cost basis, that is, the amount of investment already in the host country as opposed to the flow of capital into the host country in a given year. The indicator is a composite figure and its movements are influenced by factors in addition to foreign investment into a country. These factors are broadly the US dollar exchange rates used to calculate FDI stock (at year-end exchange rates) and GDP (at average for the year exchange rates), and the relative size of GDP between countries. It should be noted that the inconsistency in the application of exchange rates used for translating stocks of FDI and GDP into US dollars from national currencies can influence the ratio of FDI to GDP and significantly alter the rankings.

The world inward FDI stocks have skyrocketed over the past two decades from $480 billions in 1970 to $8,902 billions in 2004 (see Table-2.5). Though the world FDI is very unevenly distributed, all regions have shown an increasing inward FDI stock (see Chart-2.2). This trend was probably sparked off by the increasingly rapid tendency towards globalization in the world economy and the privatization and denationalization of government-owned assets. Given the fact that the USA, France, Germany, Japan and the UK have been responsible for nearly 60% of FDI flows worldwide, the stock of FDI is always affected by the cyclical economic movements in the developed countries (Arbenser 2003).

Chart-2.2



Source: UNCTAD WIR-1995-2005

Despite a considerable growth from 3% to 12% in FDI stocks in the period 1970-2004 (see chart-2.3), Pakistan still struggled to achieve a significant share of FDI stock as compared to the other South Asian countries (see Table-2.7). As the stock is dependent on the inflows to a country along with the revaluation affect, the foreign investors did not prefer to reinvest their earnings in the projects. This could be due to companies

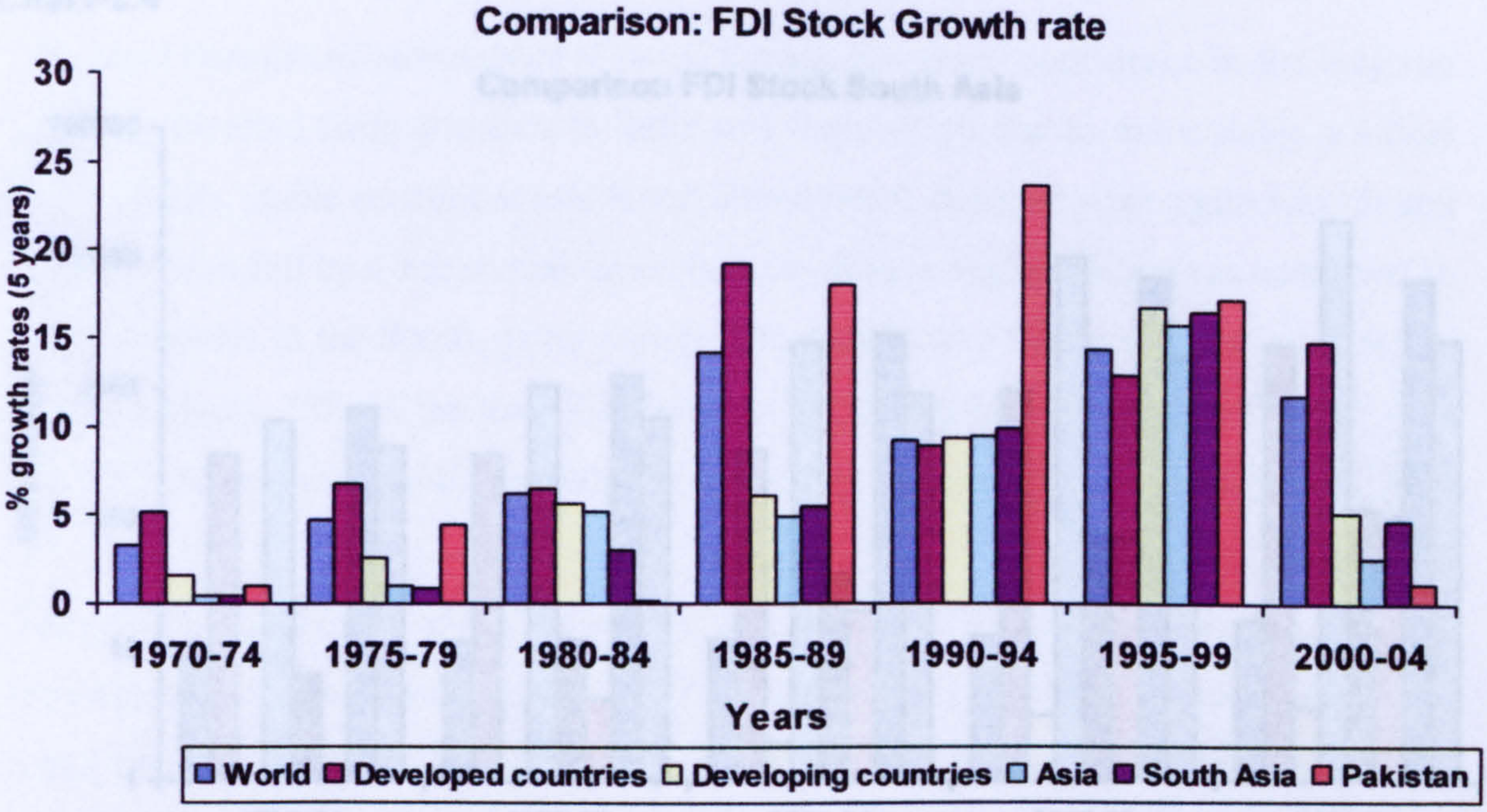
availing themselves of the facility for 100% profit repatriation along with the uncertainty of political institutions.

Despite a substantial growth rate of FDI stock in the world [3%-12%], developed countries [5%-15%], developing countries [2%-5%], Asian countries [0.49%- 3%] and the South Asian region [0.44%-5%] during 1970-2004, Pakistan faced fluctuations in its growth rate which was 1% for 1970-74, 5% for 1975-79, 0.08% for 1980-84, 18% during 1985-1989, 23% during 1990-94, 17% during 1995-99 and down to 1.2% during 2000-04.

These fluctuations could be due to different economic and political reasons in the region in general and in Pakistan itself in particular (see chart 9). A substantial growth in FDI stock could only be recorded for the period 1985-2000 due to the government of Pakistan's investment policies in the liberalization of the economy and also substantial FDI inflows with 26% of the total FDI inflows coming during 1994-2000, particularly in independent power generation (see Table 2.4, sector-utilities). The positive growth rate did not last long and dropped to minus12% in 2001 due to the change of political events in the globe in general and the South Asian region in particular. Pakistan was the most affected part of region in FDI flows due to the terrorist threats to Western interests after the September 11, 2001 terrorist attacks on the US. The USA and Western developed countries like the UK, France, Germany and Italy are the major contributors of foreign direct investment into Pakistan providing more than 50% of FDI inflows on Table 2.3(page 33).

Pakistan has been able to attract its main FDI investors from the US and the western world due to its cooperation with the US war on terrorism and was able to reach 1.21% for 2000-04 because FDI inflows grew during 2003-04 by 60 % on Table 2.2 (page 32)

Chart-2.3



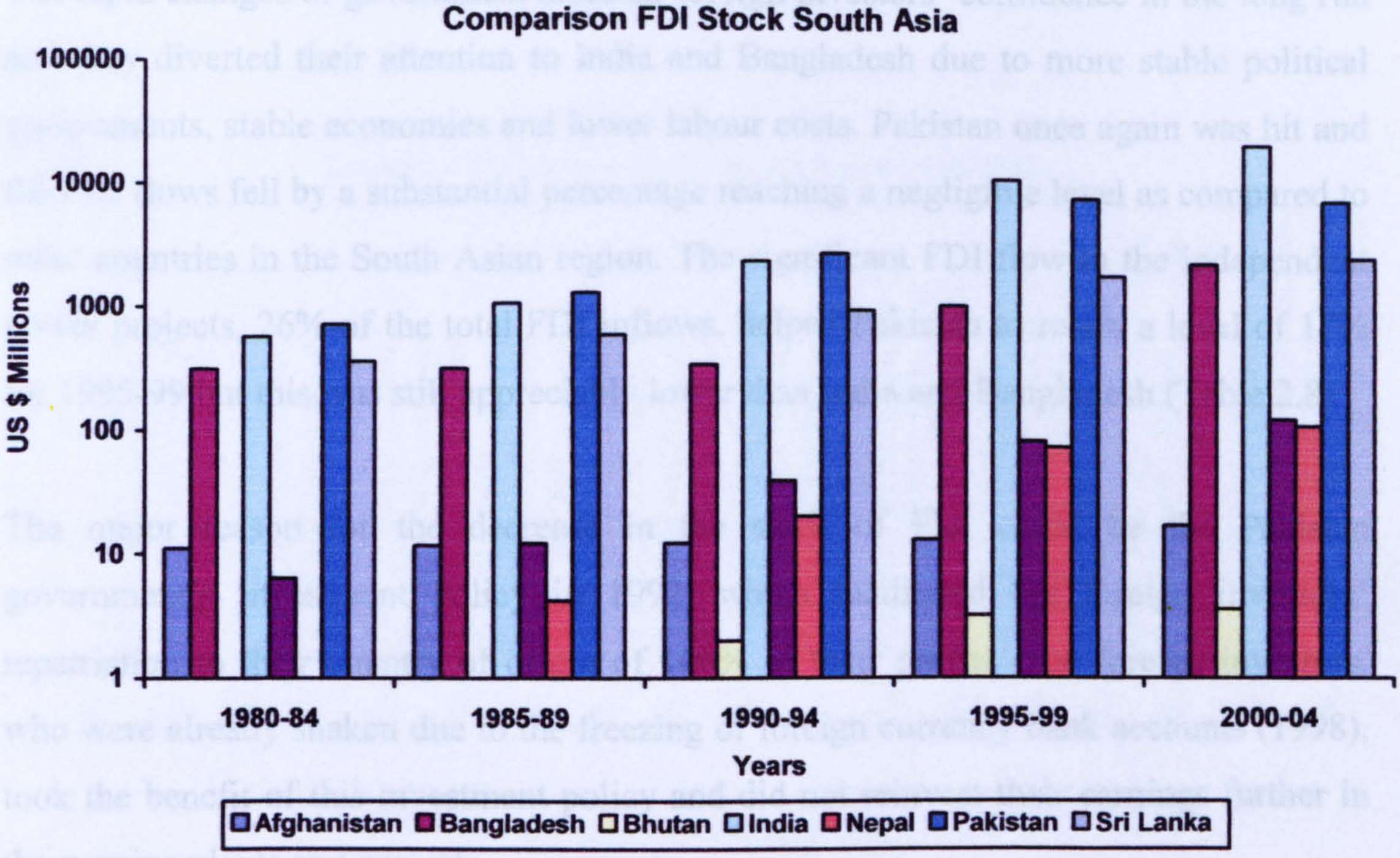
2.2.1.1 FDI Stock Trends in South Asia

Although the South Asian region has not been able to get a substantial share of the world FDI stock, Pakistan has been able to achieve a better share of FDI stock, nearly 50% of the total FDI stock for 1980-1995, due to better liberal policies on FDI flows along with a more stable political situation and better economic growth of 4%-10% for 1980-1995. In 1992, the Pakistan government also introduced more facilities for foreign investors through its investment policy. Foreign investors also became more interested in the government's privatization and denationalization policy and a substantial investment was made in independent power projects to fulfil the electricity needs of the growing Pakistani economy during 1980-1995.

This trend did not last for long as the sudden regime changes destabilized the political institutions and foreign investors' confidence. India and Bangladesh became a safe heaven for foreign investors due to low labour costs and also a much more stable political environment. So during 1990-2004, India, Bangladesh and Sri Lanka saw a substantial growth in FDI stock due to FDI inflows and more stable economies, political

institutions and foreign exchange rates. During 1995-2004 they achieved a share of the total FDI stock in excess of 75% (Table 2.8).

Chart-2.4



2.2.1.2 FDI Stock Trends in Pakistan

Despite political and economic turmoil, FDI stock in Pakistan showed quite steady growth of 1.00 % - 4.49% during 1970-79. Despite a politically stable and elected government and a lowering of the political risk index to just above 50% during 1970-77, Pakistan was not able to attract FDI due the nationalization policy of the newly elected government after a long period of political unrest from 1965 to 1970 (Appendix 4.2(A)).

After the change of regime in 1977, the military dictator reversed the previous government's nationalization policy to attract more FDI. The change in the policy of nationalization to denationalization and privatization showed very encouraging results and the flow of FDI reached an average growth of 18% during 1980-88 in the form of greenfield FDI (Table-2.2). This substantial growth in FDI flows to Pakistan and the successful implementation of the privatization policy helped in building up FDI stock in the country. The regional political events like the Russian invasion of Afghanistan during 1986 and the United States' alliance also became helpful for a country like

Pakistan to attract the attention of western investors. The trend of positive growth continued until 1995 and reached 24% growth, the biggest ever in the South Asian region despite three consecutive changes of governments during 1990-1995.

The rapid changes of government affected foreign investors' confidence in the long run and they diverted their attention to India and Bangladesh due to more stable political governments, stable economies and lower labour costs. Pakistan once again was hit and the FDI flows fell by a substantial percentage reaching a negligible level as compared to other countries in the South Asian region. The significant FDI flow in the independent power projects, 26% of the total FDI inflows, helped Pakistan to retain a level of 17% for 1995-99 but this was still appreciably lower than India and Bangladesh (Table 2.8).

The major reason for the decrease in the stock of FDI could be the Pakistan government's investment policy in 1992, which facilitated the foreign investors' repatriation to their country of origin of 100% of their profits. The foreign investors, who were already shaken due to the freezing of foreign currency bank accounts (1998), took the benefit of this investment policy and did not reinvest their earnings further in the running plants and projects.

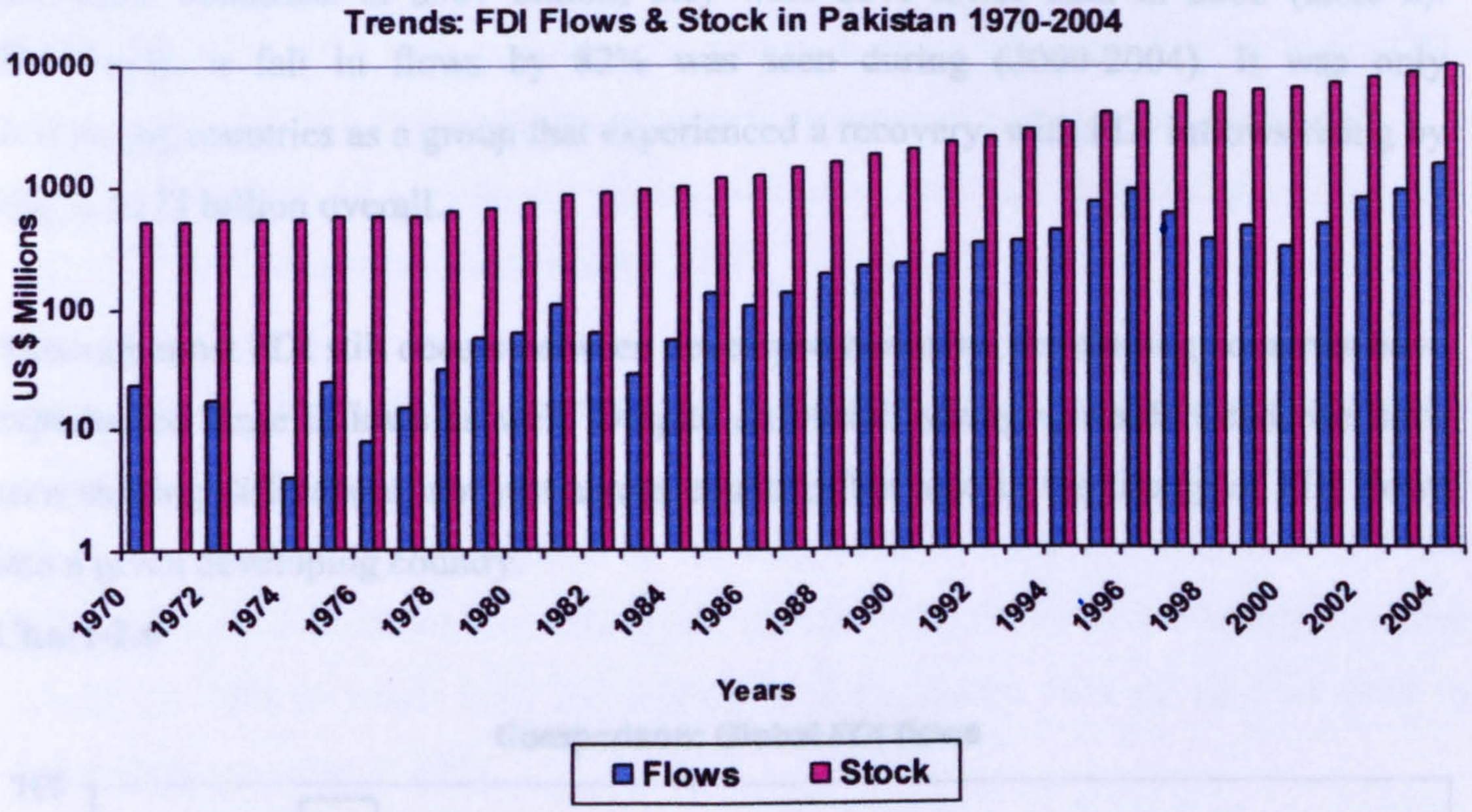
The growth in the stock of FDI during 1999-2004 remained very slow due to the military take-over after the destabilization of the political government in September 1999. This action again worried foreign investors who were concerned for the viability of their contracts and property rights and the investors once again took flight to more stable countries like India, Bangladesh and particularly China.

The chart (2.5) below gives the detailed joint picture of FDI flows (blue) and FDI stock (blue+ red). Note that the stock of FDI in the current year is the flow of FDI in the current year added to the stock of the previous year.

As Pakistan's economy started witnessing a visible turnaround starting in 1985, foreign investors have once again shown readiness to put their capital into business concerns in Pakistan, a country they practically shied away from during the last decade. In 2004-05,

Pakistan had already attracted over $1.5 billion FDI, a significant improvement as compared to $949.4 million in 2003-04.

Chart-2.5



2.2.2 FDI Flows

Global FDI inflows rose modestly in 2004 following large declines in their value in 2001 (41%), 2002 (13%) and 2003 (12%). At $648 billion in 2004, they were 2% higher than in 2003. This growth reflected an increase of flows to developing countries, which rose by 40% ($233 billion) as compared to 2003 and their share reached 36% of the total flows of global FDI, the highest since 1997 (UNCTAD 2005:1).

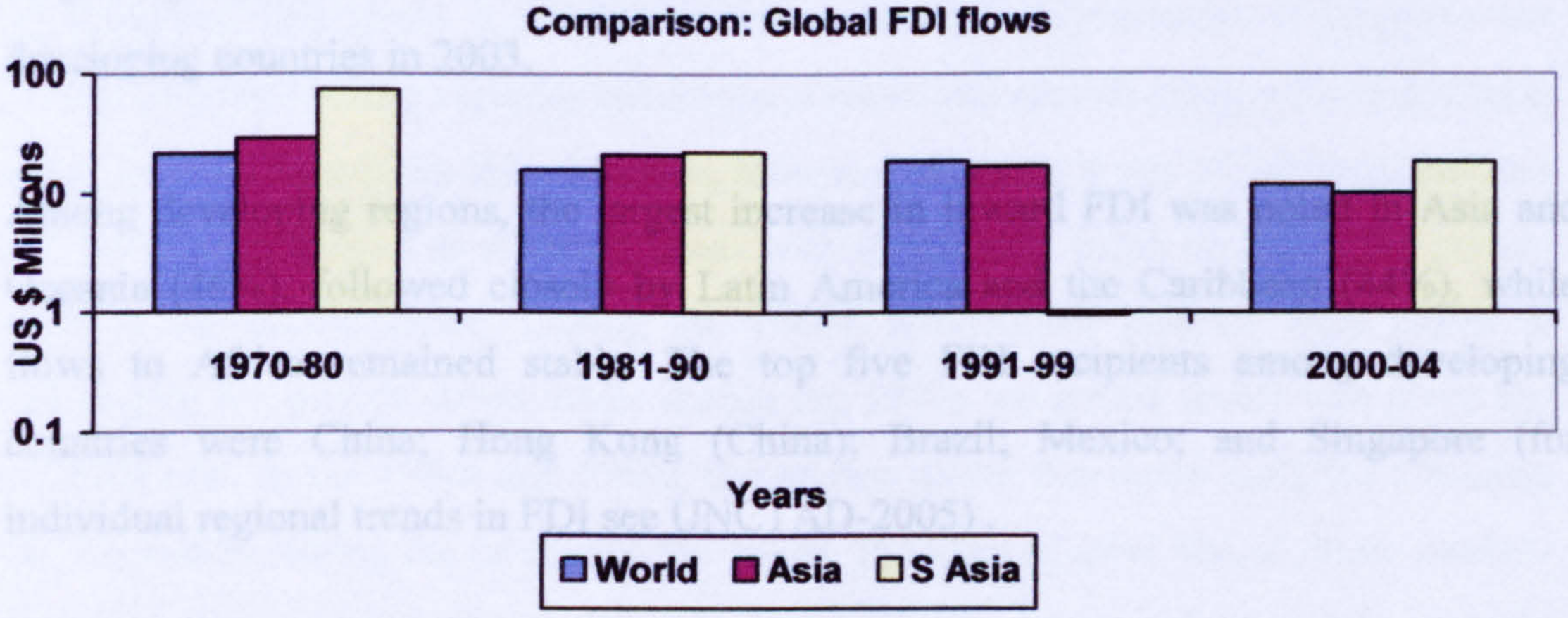
This section documents the fact that developing regions are leading the recovery in FDI flows. In 2002, roughly $651 billion of FDI inflows occurred, and this amount was reduced from the peak in 2000. Growth in FDI has also been strong, exceeding 20% annually since the 1980s with a surge of over 30% in the late 1990s (UNCTAD 2003:3). Despite the liberalisation of investment policies (see annex 1) throughout the world, in developing countries in general and in Pakistan in particular, declining trends in FDI

flows during 2000-2003 from 30% to minus15% were still seen. The developing countries in Asia, South Asia and Pakistan have shown signs of recovery with an overall positive growth of 9% (1970-2004) (UNCTAD 2004 & 2005).

Global inflows of foreign direct investment (FDI) declined in 2003 for the third year in a row, to $560 billion (table 1). This was prompted again by a fall in FDI flows to developed countries: at $367 billion, they were 25% lower than in 2002 (table 2). Worldwide, a fall in flows by 82% was seen during (2000-2004). It was only developing countries as a group that experienced a recovery, with FDI inflows rising by 9%, to $172 billion overall.

Although most FDI still occurs between developed countries, developing countries have experienced large inflows as well. Despite an overall strong upwards trend, we have seen striking differences, not just across countries but also in the timing of FDI flows into a given developing country.

Chart-2.6



2.3 FDI to developing countries

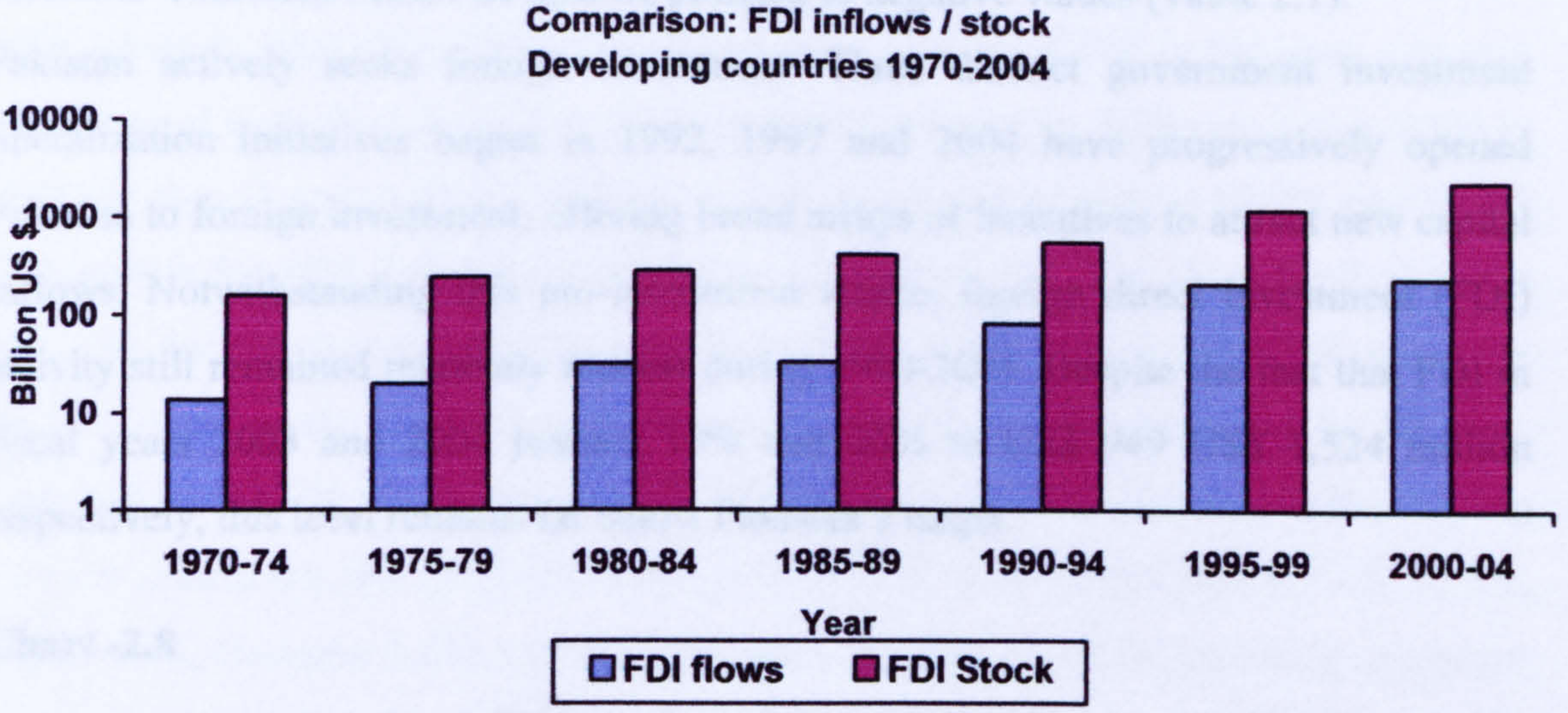
Developing countries, emerging economies and countries in transition increasingly see foreign direct investment (FDI) as a source of economic development, modernization and employment generation, and have liberalized their FDI regimes to attract investment.

The participation of developing countries in the total inflows of foreign direct investment (FDI) has varied considerably over the last 25 years, increasing from 15% in 1980 to 46% in 1982 and levelling off at slightly over 20% during the last four years.
In recent years, however, the increase in FDI flows to developing countries turned out to be higher than the increase in FDI flows to developed countries. Average annual FDI flows to developing countries soared eight-fold, when comparing 1982-1987 and 1994-1997. They had remained relatively stable during the crisis years of 1995-1997, but dropped during 1997-1998 and dropped further during 1998-2002 from 25% to 23%. However, after 2002, the developing countries recovered and attracted a share of 31% during 2000-2003. As a result, developing countries attracted almost one-third of world-wide FDI flows recently (Nunnenkamp 2002).

FDI flows also retained their upward trend until 2004, after three consecutive declines, with UNCTAD estimating a 6 percent increase to US$612 billion globally, and a 48 percent increase to US$255 billion in the case of developing countries. At US$ 648 billion, global FDI inflows were 2% higher than in 2003. Flows to developing countries surged by 40% to reach US$ 233 billion in 2003. Some 36% of all FDI went to developing countries in 2003.

Among developing regions, the largest increase in inward FDI was noted in Asia and Oceania (46%), followed closely by Latin America and the Caribbean (44%), while flows to Africa remained stable. The top five FDI recipients among developing countries were China; Hong Kong (China); Brazil; Mexico; and Singapore (for individual regional trends in FDI see UNCTAD-2005) .

Chart 2.7



2.4 FDI Inflow Trends to Pakistan

Pakistan was basically an agricultural economy upon its independence in 1947. Its industrial capacity was negligible except for processing locally-produced, agricultural raw material. This made it imperative for succeeding governments to improve the country's manufacturing capacity and increase economic growth along with agricultural output. In order to achieve this objective, however, changing types of industrial policies have been implemented at different times with a changing focus on either the private sector or the public sector. During the 1960s, government policies were aimed at encouraging the private sector while during the 1970s the public sector was given the dominant role. In the 1980s and 1990s, the private sector was again assigned a leading role. Especially during the decade of the 1990s, Pakistan adopted liberal, more market-oriented policies and declared the private sector the engine of economic growth. Moreover, Pakistan has also offered an attractive package of incentives to foreign investors.

The government of Pakistan issued an Economic Reforms Order (1972) taking over the management of ten major categories of industries, commercial banks, development financial institutions and insurance companies. There was another round of nationalization of small-sized agro processing units during 1975. The sudden shift

towards the nationalization of the private sector industrial units shattered private investors' confidence and FDI inflows plunged to negative values (Table 2.1).

Pakistan actively seeks foreign investment. Three distinct government investment liberalization initiatives begun in 1992, 1997 and 2004 have progressively opened Pakistan to foreign investment, offering broad arrays of incentives to attract new capital inflows. Notwithstanding this pro-investment stance, foreign direct investment (FDI) activity still remained relatively modest during 1990-2004. Despite the fact that FDI in fiscal years 2003 and 2004 jumped 19% and 60% to US$ 949 US$ 1,524 million respectively, this level remains far below Pakistan's target.

Chart -2.8

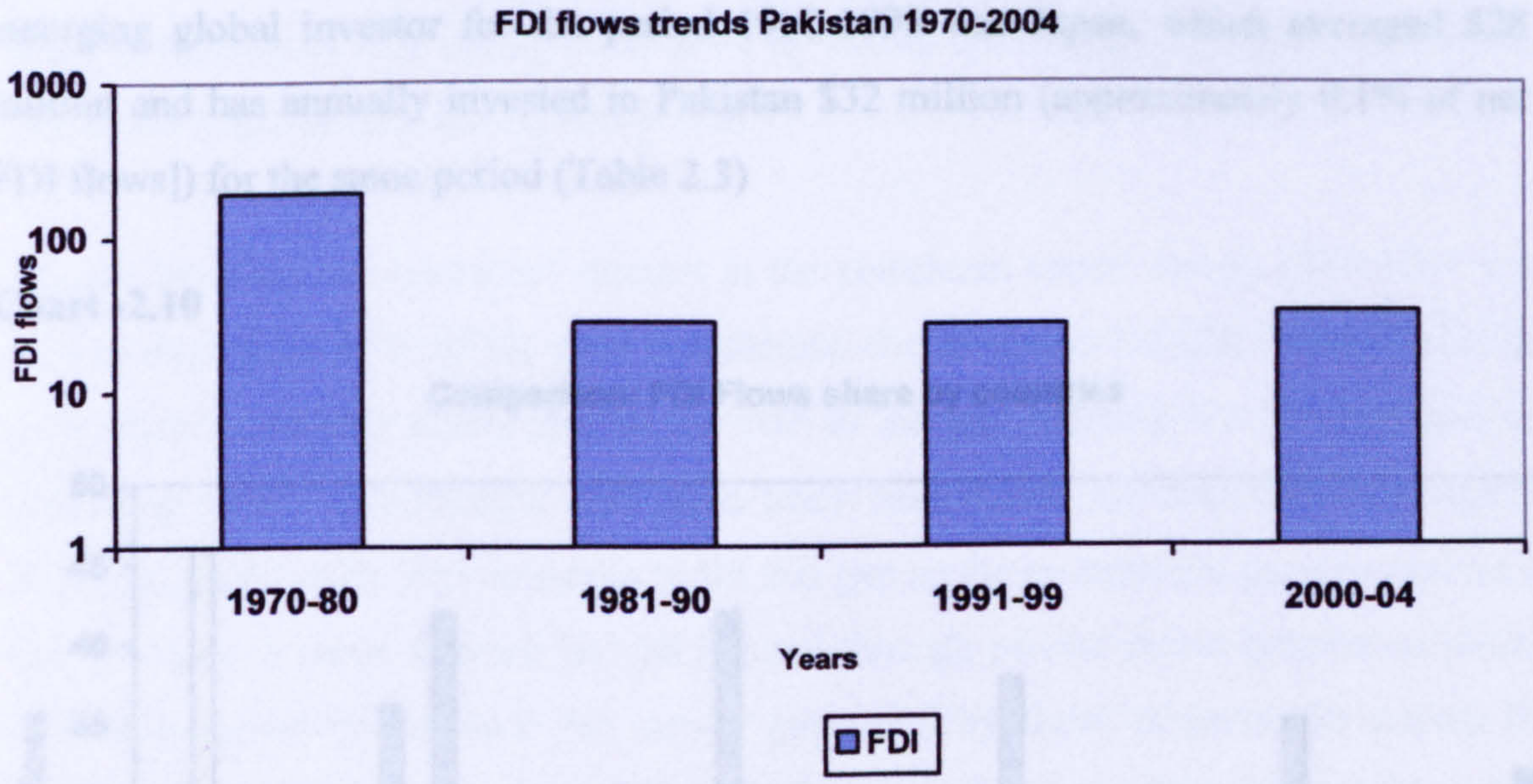
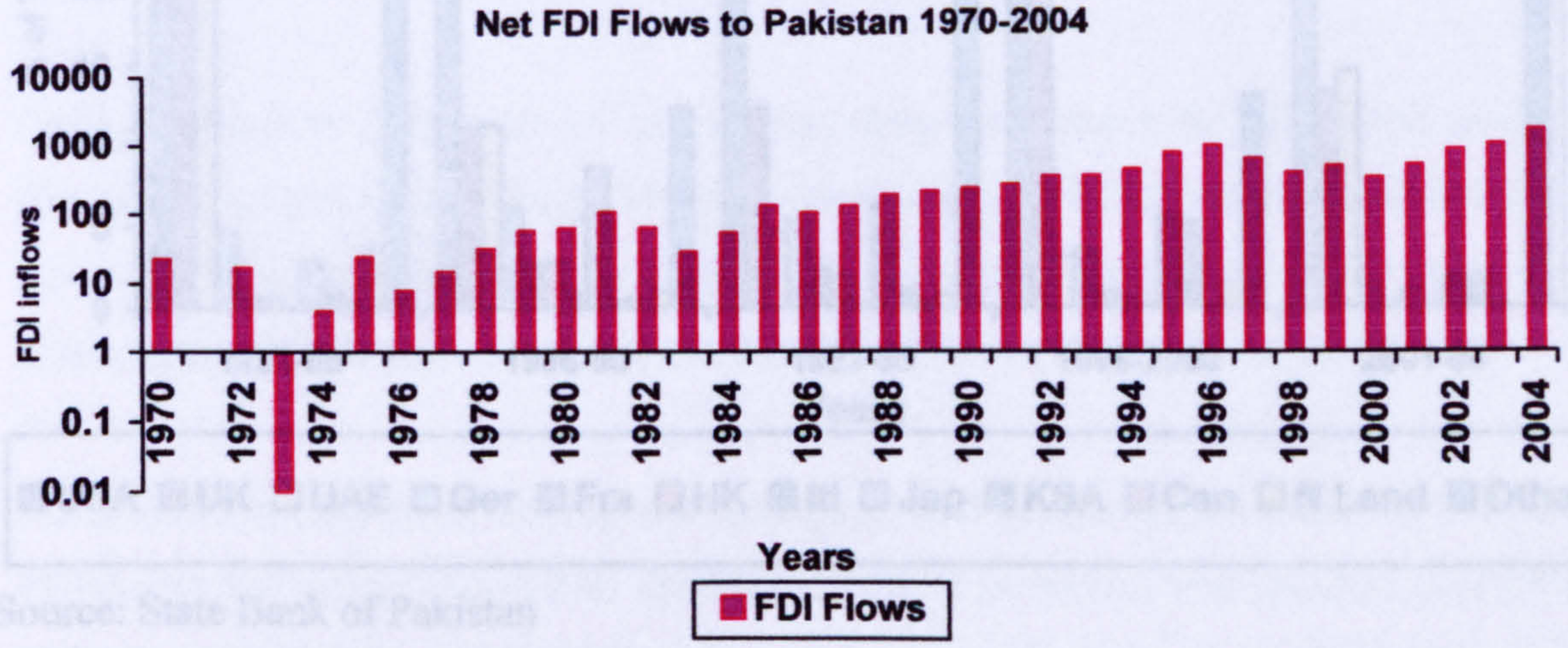


Chart-2.9

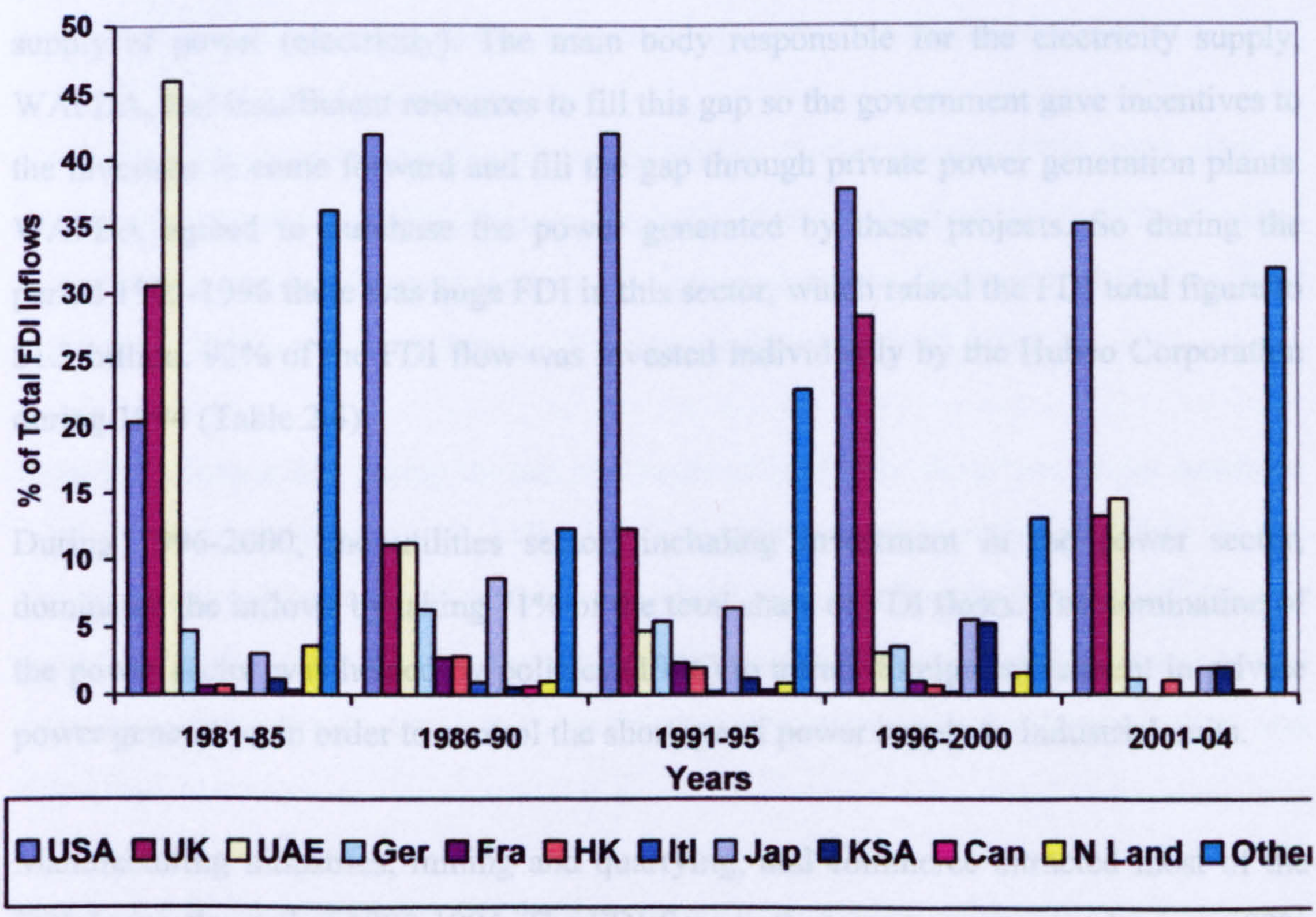


2.4.1 FDI Share by Country

FDI flows into Pakistan originating in developed countries dominated from 1981 till 2004 (chart 4). The US and UK have been major sources of FDI in Pakistan, although the shares of both the US and the UK have fluctuated widely, falling to below 8.8% in 1983 for the US and 4.7% in 1986 for the UK and rising as high as 63.7% and 35.2% respectively for 1991 and 1996/1999 for the US and the UK. The share for the US has been, by far, the largest of all the countries. Since 1998, however, the UK share has become equal to the US FDI share. The FDI share from US dominated for 20 years followed by the UK 12.9%, the UAE 11.6%, Japan 5.7%, and Germany 5.4%. During the post reform era, the US share of FDI rose to 42% as compared with the UK 12.3%, Japan 6.4%, Germany 5.4%, and the UAE share of 4.7%. It can be noted that the major emerging global investor for the period 1990-1999 was Japan, which averaged $28 million and has annually invested in Pakistan $32 million (approximately 0.1% of net FDI flows]) for the same period (Table 2.3)

Chart -2.10

Comparison: FDI Flows share by countries



Source: State Bank of Pakistan

2.4.2 FDI share by sector

Having examined the trends of FDI, it is worthwhile to review its overall sectoral distribution pattern. This analysis may reflect three things; firstly it may reflect the preferential treatment given by the government of Pakistan to certain sectors during the process of encouraging FDI; secondly, it may also indicate the foreign investors' own interest; and thirdly the demand for the product due to the gap between the demand and supply.

The information presented in table 2.4 as revealed from the State Bank of Pakistan and BOI Pakistan (2000), shows the changes in FDI stock as percentage of regional FDI stocks over the past 20 years. Communication, mining and commerce dominated the sectoral inflows of FDI during 2000-2004 by taking an average 26% share of the total FDI flows into Pakistan during that period.

Despite international investors' interest in the petroleum sector during 1987-1994 with an investment of 45% of the total investment, the investors became interested in the generation of private power due to the rise in the gap between the demand and the supply of power (electricity). The main body responsible for the electricity supply, WAPDA, had insufficient resources to fill this gap so the government gave incentives to the investors to come forward and fill the gap through private power generation plants. WAPDA agreed to purchase the power generated by these projects. So during the period 1995-1996 there was huge FDI in this sector, which raised the FDI total figure to $1.3 billion. 92% of the FDI flow was invested individually by the Hubco Corporation during 1994 (Table 2.4).

During 1996-2000, the utilities sector, including investment in the power sector, dominated the inflows by taking 71% of the total share of FDI flows. The domination of the power sector was helped by policies (1996) to attract foreign investment in private power generation in order to control the shortage of power supply to industrial units.

Manufacturing industries, mining and quarrying, and commerce attracted most of the FDI during the period 1980-1994. The FDI flow to these sectors was noted as over 83% of the total FDI but, over the time period, a downward trend was seen which kept on

falling from 75% in 1982 to 26% in 1983 with a rise to 54.7% in 1984. The manufacturing industry share rose from 11% during 1987-1993 and had a reasonable rise to 35% in 1994.

The sharp increase of FDI in the commerce sector during 1992-1994 is mainly due to the inflow in the financial services sub sectors (Khan 1999). Being an agrarian-based economy with the largest part of GDP coming from the agricultural sector, so after the rift between the independent power projects and the government of Pakistan on the tariff issue, the investor turned towards the agricultural sector and a rise in the FDI share has been monitored during 1996-1999. At present this sector is dominating the FDI distribution. Despite a 36.1% share of the FDI in 1999 for agriculture, forestry, hunting and fishing, the overall share during the decade 1990-1999 remained very low at 7.99% of the total as compared to the share of agriculture to the overall GDP of the country (Table 2.4).

The power sector also showed the declining trend during the last two years 2002-2003 soon after the change in the government in 1999. The drop in the FDI share in the power sector indicates less interest by international investors in the power sector.

Commerce remained the dominating sector during the last decade, 1990-2005, with an average 21.66% share of FDI. This was probably due to the privatization of the banking sector. Many foreign financial institution groups from the Gulf entered putting their share of the FDI into the purchasing of the nationalized banks (Table 2.4).

Despite its domination during the last two years of the 1990s, the power sector remained third in the overall share of FDI. The Government gave more incentives to the companies in mining and oil exploration, which attracted foreign investment into this sector. Also, the tariff rift between the Government and the independent power plants caused the investors to become more interested in mining and oil prospecting and extraction.

Inflows of FDI into the prioritised power sector have dominated for the years 1990-95, but during 1996-99 its share has declined from 28% 1998 to 14.3% in 1999-2000. The

report (Daily Star 2000) concludes that the fall in the share of power is due to over-saturation in this sector. The chemical, pharmaceutical and fertilizer sector has emerged as the single largest recipient of FDI flows and it has improved its share in FDI from 11.2% in the fiscal year 1998-99 to 28.3% during 1999-2000. The tremendous increase in FDI flows in this sector is because of the commissioning of ICI's PTA Plant and FFC-Jordan's fertilizer unit near Karachi, the Daily Star economic report noted. The implementation of the National Mineral Development Policy announced in 1995, which was aimed at attracting foreign investment to fill the gap between resources and investment, remains slow. However, it has succeeded in attracting a number of multinational companies (MNCs) currently engaged in examining prospects for the exploration and development of precious and base metals in Pakistan. FDI in the Mining and Quarrying sector has increased by 50% during 1997-98, but since then it has started declining. Its share of the total FDI inflow, however, peaked at 17% in the fiscal year 1998-99, but during July-April 1999-2000, it had declined to 15.2 per cent (Daily Star, 2000).

Three sectors mining and communications attracted most of FDI during 2001-02. Mining & quarrying and oil & gas continued to be the preferred area for foreign investment in Pakistan during 2001-02, mining sector attracted 25% and Communications attracted 16% of total FDI flows to Pakistan. The increasing flow of foreign investment in the field of mining & quarrying and oil & gas is driven by the policy measures taken by the government. This provided an impetus to exploration of oil and gas, which was largely ignored in the past. With the revival of Saindak copper project and further exploration of Lakhra coal reserves, the chances of attracting more foreign investment are brighter (SBP-2001).

The improvement in the FDI inflows in the communication sector is to be seen in the context of fiscal relief given in the Federal Budget and follow-up steps for the promotion of information technology and software development in the country. The subsequent unveiling of the IT policy and IT exhibitions were held to attract foreign investors. Policy measures initiated during 2001 mainly included duty-free imports of computer hardware and accessories, reduction of duties on software exports, tax incentives to IT institutions, drastic reductions in Internet tariff for ISPs etc. Textiles,

electronics and construction have also shown an improvement in attracting FDI during the year (SBP-2001).

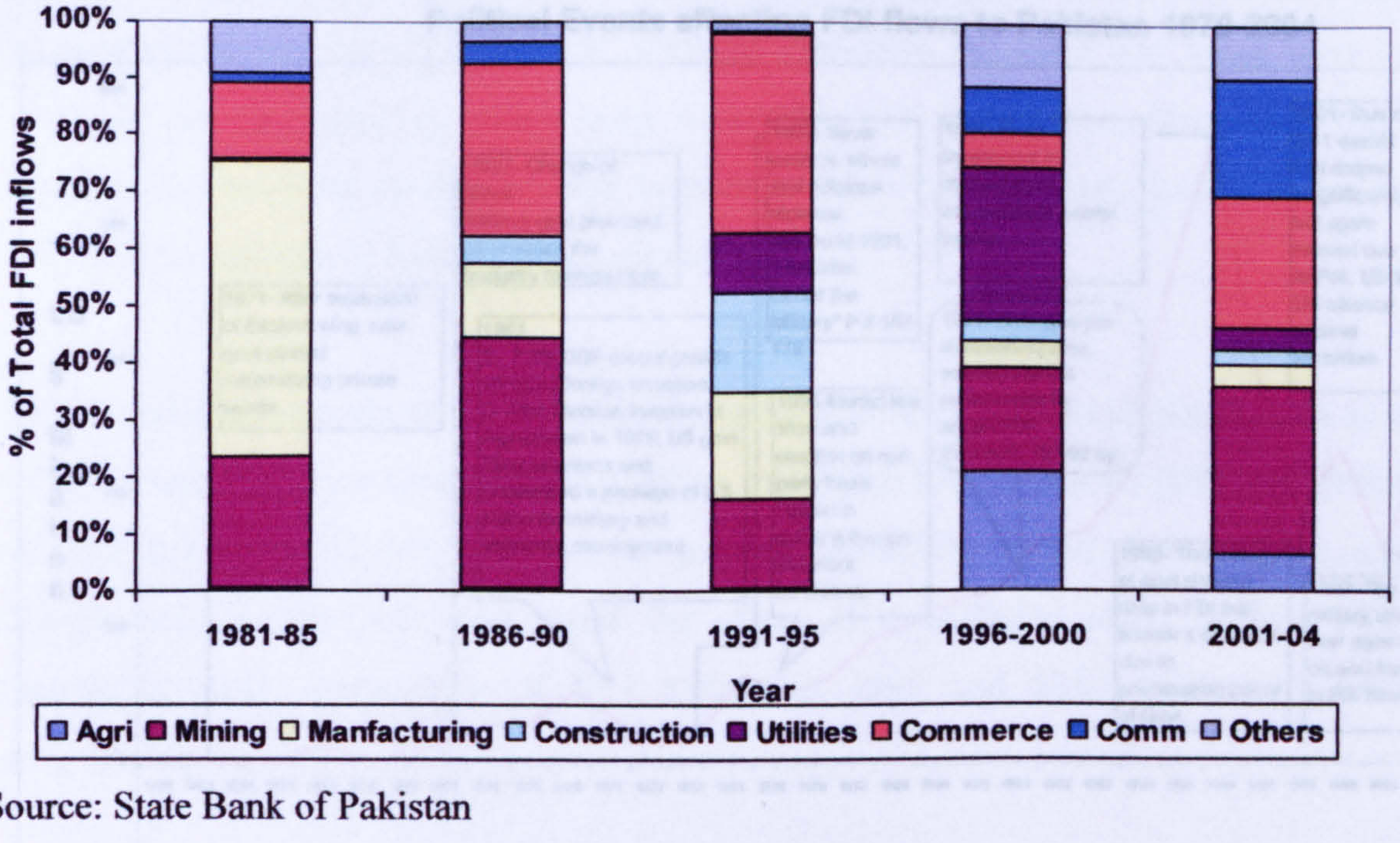
Globally, foreign direct investment (FDI) fell by 17 % during 2002; this was the second time that these flows decline, reaching the lowest level for the last five years. The key reasons for this slowdown include: (1) relatively poor economic performance in major economies, (2) non-satisfactory performance of stock markets, and (3) drastic political changes in the world. Interestingly, according to World Investment Report 2003, Pakistan was amongst the few countries that succeeded in attracting increased FDI in both 2001 and 2002. The significant improvements in macroeconomic fundamentals and better credit rating are probably some major reasons for this divergent trend (SBP-2002).

During 2002-03, the financial sector took the lead over other sectors and attracted 31% of the total inflows, which is due to sale proceeds from privatization of UBL in July-2002. The mining and quarrying sector attracted 24% of the total FDI flows, the UK based FDI was largely in oil & gas exploration, that from the USA was also concentrated in the mining and communications. The communication sector remained the third most attractive sector as investments from US and UAE during 2002-03. This increase in FDI during 2004 was relatively broad-based, with almost all sectors witnessing an increase. But the most significant flows were due to privatization and deregulation in telecommunications and financial sectors (Table 2.4). While partial receipts of the HBL privatization and expansion in Islamic Banking during 2004 pushed up FDI under financial sector, FDI in communications was attributable to the privatization of PTCL, entry of two new cellular companies, and introduction of new technologies like WLL service. Excluding these transactions the growth in FDI during FY05 was small. FDI during 2004 is much higher due to the receipts on account of PTCL privatization, as well as the entry of new Islamic banks (SBP-2003).

This is a reflection of: (1) a successful liberal regime to attract foreign investment; (2) improved macroeconomic fundamentals; (3) appropriate amendments in laws and regulations governing FDI; and (4) the implementation of effective reforms to improve governance. This is reflected in the country's improved performance in attracting FDI

from 19% in 2003 to 60% in 2004. Nonetheless, it is worth noting that the country's record in terms of attracting FDI, is still relatively poor, and therefore Pakistan still has a lot to do, in order improve the domestic business environment (Table 2.4).

Chart -2.11



Source: State Bank of Pakistan

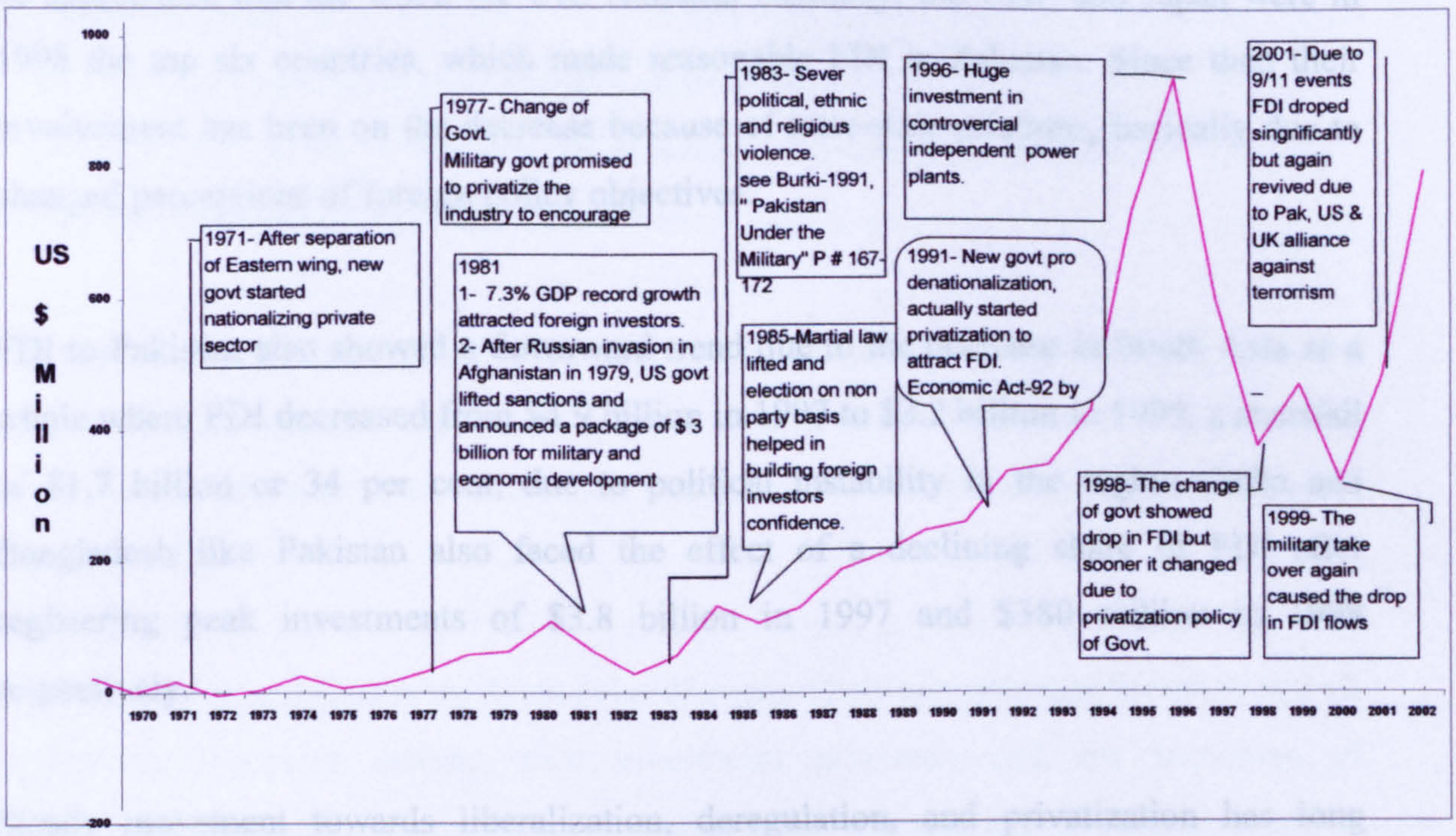
2.5 Events Influencing FDI flows (1970-2004)

With a history of political and economic turmoil, Pakistan had many ups and downs in the flows of FDI during the period 1970-2004. To give a brief graphical and statistical analysis of the shocks to FDI flows in the context of political and economic developments (1970-2004), a brief view of government policies and the effect of religion on future policies is presented in the following section, which will enable us to understand the effect of the Islamic status of Pakistan in the making of policies to attract foreign investment.

The FDI profile has been fluctuating and has been seriously affected by a number of factors like state policy, political instability in the country, (Pakistan stayed at the edge of the precipice during the 1990s), and the law and order situation which has needed considerable improvement, particularly in Karachi, the hub of commercial activity and

the industrial lifeline of the country. The local business environment, labour force, quality of life, infrastructure development, monetary policies and relations with IFIs, including the WB and IMF, have also affected FDI in one way or another (Qazi 2000).

Chart -2.12



While elaborating a number of reasons, which have contributed to the decline of FDI during the past three to four years, three factors are conspicuous. They are political instability, the law and order situation, the policy dictates of security imperatives and regional conflict. Since 1986-1999, the international community has witnessed four consecutive changes of short duration governments of Pakistan. The Pakistan Muslim League government in 1997-98 closely scrutinized the decisions of the Pakistan People's Party government in 1996, which had succeeded in taking FDI to its peak because of investment in independent power projects. The contracts signed by the Pakistan People's Party government were alleged to have involved huge kickbacks. The contracting parties were asked to lower the tariff because Pakistan was to buy electricity at a high rate. The row over the tariff rates between WAPDA and HUBCO took a

serious turn and the issue was still unresolved in 1998. This has adversely affected the scope of FDI in the country.

The other two major episodes are the nuclear explosions in 1998 and the Kargil conflict in 1999 both of which had a negative effect on FDI because both the episodes conveyed negative perceptions about Pakistan to the Western countries, investors and IFIs. It can be appreciated that the USA, the UK, Holland, Germany, the UAE and Japan were in 1998 the top six countries, which made reasonable FDI in Pakistan. Since then their involvement has been on the decrease because of inter-state relations, basically due to changed perceptions of foreign policy objectives.

FDI to Pakistan also showed a downward trend due to the decrease in South Asia as a whole where FDI decreased from $4.9 billion in 1997 to $3.2 billion in 1999, a shortfall of $1.7 billion or 34 per cent, due to political instability in the region. India and Bangladesh like Pakistan also faced the effect of a declining share of FDI after registering peak investments of $3.8 billion in 1997 and $380 million in 1998 respectively.

Steady movement towards liberalization, deregulation, and privatization has long characterized Pakistan's investment policy, since 1992 it has been generally recognized as one of the most favourable in the region. The policy direction has been consistent, market-led and business-friendly.

All industries are open to investment without government permission, except four specified industries, which are Arms & Ammunition, High Explosives, Radioactive Substances, Security Printing, and Currency or Mint.

The policy was designed for the liberalization of the service, infrastructure, social and agriculture sectors for foreign investment. Industrial, infrastructure, and social sectors are open to 100 percent foreign ownership. Services and agriculture have an upper limit of 60 percent foreign ownership (100 percent foreign equity is allowed in services for the first five years) and complete freedom of choice on the location of activities. The

policy also gave the incentives of full repatriation of capital, profits and dividends from all activities. Royalty, technical, and franchise fee payments are allowed for all sectors as are the duty-free import of machinery for high technology, value-added, export industries and the corporate and agriculture sectors. Generous fiscal incentives, tariff incentives, full duty exemptions and, for registered agricultural companies, duty reduction to 10% on PME imports for other priority industries, service, infrastructure, and social sector projects are allowed. Tax relief (first-year allowance) for PME costs is allowed as follows:

1. 90 % for value-added, export, and hi-tech industries.
2. 75% for other priority industries, infrastructure, and corporate agriculture.
3. 50% for services and the social sector.

The Board of Investment (BOI) of Pakistan took a proactive service-oriented approach to promoting investment opportunities in all sectors of the economy and to providing investment facilitation services to local, foreign and overseas Pakistani investors (Pak Watan 2000).

The Board of Investment is the focal point of contact between potential investors and all government agencies dealing with investment proposals and the provision of infrastructure and other facilities. To strengthen the leverage and effectiveness of the BOI, Ministers and Secretaries of Economic Ministries are actively associated with all activities of the BOI. The BOI maintains strong partnerships with Provincial Investment Committees across the nation to facilitate investments. Policies previously stated that only the manufacturing sector was open to foreign investment. Now, the Policy Regime is much more liberal with most other economic sectors open for foreign involvement and with significant efforts at mobilizing domestic financial resources towards long term investment.

2.6 Conclusion

The role of FDI in the development of developing nations needs no stress. However, it is important for any country like Pakistan to consider which sectors need the FDI the most, and how to prepare these sectors for the same.

Pakistan has been actively trying to seek foreign direct investment since the 1970s but no substantial and helpful policy was implemented by the most stable and powerful elected government during 1970-77. Instead, the government during 1970-77 nationalized most of the private sector financial and industrial units, which became a major political factor in blocking FDI inflows during 1970-1975. After the regime change in 1977, the new government, though headed by a military dictator, began the privatization of nationalized industrial and financial institutions. Three distinct government investment liberalization initiatives begun in 1992, 1997 and 2000 have progressively opened Pakistan to foreign investment, offering broad arrays of incentives to attract new capital inflows. The previous 1999-2002 military government initiated a successful, broad-based macroeconomic reform and structural adjustment program with the assistance of international financial institutions.

Despite major policy incentives to foreign investors, the inflow of FDI to Pakistan has been declining since 1995-96 for a variety of reasons including the saturation of investment in the power sector; the East Asian financial crises of 1997; economic sanctions and the freezing of foreign currency accounts in May 1998; the independent power projects and the HUBCO issue, particularly the way it was handled in the past. Low levels of foreign exchange reserves and the threat of default on external payment obligations along with the disarrayed and unstable relations with the International Financial Institutions (IFIs) have all been important issues. Since 1998 the government has succeeded in removing the above listed constraints. For example, all the independent power projects issues, including the HUBCO one, have been resolved, foreign exchange reserves have reached a comfortable position, economic fundamental have improved, all economic sanctions have been lifted and Pakistan has acquired high credibility for its reform program from the IFIs. The stability of the exchange rate has also been restored. The investment climate has further improved because of Pakistan's enhanced stature in the global order. It is an accepted fact that taking foreign investment from a low and declining path to a higher and sustainable path is a daunting task. Flows of foreign investments do not increase overnight. With the removal of many irritants and significant improvements in the country's macroeconomic environment, the flow of investment has picked up. Foreign investment stood at $475 million in 2001-02, which was higher than the $403 million in 1998-99. During the fiscal year (2003-04),

almost $1.0 billion of foreign investment is expected. It may also be noted that the monthly flow of foreign investment, which averaged $ 33.6 million in 1998-99, had jumped to $52 million in 2001-02 - an increase of 44 percent. Recent information suggests that overall foreign investment stood at $ 167.4 million during the first quarter of the 2004. Notwithstanding the increase in foreign investment in recent years, much more effort will be required to attract foreign investment on a sustainable basis.

The study of the political economy of Pakistan suggests that the failure to acknowledge the relationship between the economy, state and polity and FDI flows are at the forefront of the necessary development of the country in general and the nation in particular and it should be put in the forefront, which means that an economic science that does not account for the political aspect of the country is likely to be less than satisfactory. Hence it can be concluded finally that any economy must be a political economy (Bruno 1978).

Finally speaking, keeping an eye on Pakistan's economic situation, it is possible that certain sectors have the potential of not only becoming new attractions for foreign investors, but can also prove to be a cure for ills like unemployment and poverty that have been a disturbance for the policy planners for many years. Communication, utilities and commerce are being cited as being among these sectors in chart 2.11 (page 25). It is good to note that foreign investors have already started joining hands with local firms involved in these sectors.

Table-2.1

FDI flows World/ Asia/ South Asia/ Pakistan (US $ mill: nominal)
Pakistan as % World/ Asia/ South Asia FDI flows 1970-2004

Year	FDI in world	FDI in Asia	FDI in South Asia	FDI in Pakistan	% of World	% of Asia	% of South Asia
1970	8,601	322	69	23	0.0027	0.071	0.333
1971	11,095	436	49	1	0.0001	0.002	0.020
1972	11,771	708	35	17	0.0014	0.024	0.486
1973	17,056	1,352	35	-4	-0.0002	-0.003	-0.114
1974	21,317	1,451	62	4	0.0002	0.003	0.065
1975	21,821	1,736	110	25	0.0011	0.014	0.227
1976	18,812	1,423	60	8	0.0004	0.006	0.133
1977	24,887	1,468	-22	15	0.0006	0.010	-0.682
1978	31,108	1,620	52	32	0.0010	0.020	0.615
1979	42,358	2,440	154	58	0.0014	0.024	0.377
1980	55,336	3,174	185	63	0.0011	0.020	0.341
1981	59,085	4,497	249	108	0.0018	0.024	0.434
1982	41,533	4,844	200	64	0.0015	0.013	0.320
1983	40,456	4,562	72	29	0.0007	0.006	0.403
1984	49,993	4,655	107	55	0.0011	0.012	0.514
1985	52,704	5,374	264	131	0.0025	0.024	0.496
1986	81,903	5,973	261	105	0.0013	0.018	0.402
1987	130,672	8,745	410	129	0.0010	0.015	0.315
1988	151,588	11,766	327	186	0.0012	0.016	0.569
1989	187,705	12,449	487	210	0.0011	0.017	0.431
1990	191,737	19,242	464	224	0.0012	0.012	0.483
1991	145,520	22,211	389	257	0.0018	0.012	0.661
1992	157,649	29,445	750	335	0.0021	0.011	0.447
1993	205,883	46,937	1,118	346	0.0017	0.007	0.309
1994	231,368	57,323	1,595	429	0.0019	0.007	0.269
1995	310,741	64,032	2,953	736	0.0024	0.011	0.249
1996	346,978	74,649	3,526	939	0.0027	0.013	0.266
1997	438,949	86,347	4,908	601	0.0014	0.007	0.122
1998	616,619	82,615	3,659	376	0.0006	0.005	0.103
1999	865,487	105,621	3,061	470	0.0005	0.004	0.154
2000	1,387,953	146,067	3,109	322	0.0002	0.002	0.104
2001	817,574	111,854	4,082	485	0.0006	0.004	0.119
2002	678,751	94,383	4,510	798	0.0012	0.008	0.177
2003	559,579	107,120	5,611	950	0.0017	0.009	0.169
2004	648,146	147,545	7,005	1,524	0.0024	0.010	0.218
2005							

Source: World Bank CD-ROM(2005) and WIR-2000-05, Surveys of Pakistan (1970-2005),
BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)
ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)
WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)
(http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

Table 2.2
FDI inflows World/ Asia/ South Asia/ Pakistan (US $millions: nominal)
% change of FDI flows 1970-2004

Year	FDI flows in World	FDI flows in Asia	FDI flows in South Asia	FDI flows in Pakistan	% Change in World	% Change in Asia	% Change in South Asia	% Change in Pakistan
1970	8,601	322	69	23				
1971	11,095	436	49	1	29.00	35.40	-28.99	-95.65
1972	11,771	708	35	17	6.09	62.39	-28.57	1600.00
1973	17,056	1,352	35	-4	44.90	90.96	0.00	-123.53
1974	21,317	1,451	62	4	24.98	7.32	77.14	200.00
1975	21,821	1,736	110	25	2.36	19.64	77.42	525.00
1976	18,812	1,423	60	8	-13.79	-18.03	-45.45	-68.00
1977	24,887	1,468	-22	15	32.29	3.16	-136.67	87.50
1978	31,108	1,620	52	32	25.00	10.35	-336.36	113.33
1979	42,358	2,440	154	58	36.16	50.62	196.15	81.25
1980	55,336	3,174	185	63	30.64	30.08	20.13	8.62
Avg. % Change					**21.76%**	**29.18%**	**74.09%**	**192.85%**
1981	59,085	4,497	249	108	6.77	41.68	34.59	71.43
1982	41,533	4,844	200	64	-29.71	7.72	-19.68	-40.74
1983	40,456	4,562	72	29	-2.59	-5.82	-64.00	-54.69
1984	49,993	4,655	107	55	23.57	2.04	48.61	89.66
1985	52,704	5,374	264	131	5.42	15.45	146.73	138.18
1986	81,903	5,973	261	105	55.40	11.15	-1.14	-19.85
1987	130,672	8,745	410	129	59.54	46.41	57.09	22.86
1988	151,588	11,766	327	186	16.01	34.55	-20.24	44.19
1989	187,705	12,449	487	210	23.83	5.80	48.93	12.90
1990	191,737	19,242	464	224	2.15	54.57	-4.72	6.67
Avg. % Change					**16.04%**	**21.36%**	**22.62%**	**28.01%**
1991	145,520	22,211	389	257	-24.10	15.43	-16.16	14.73
1992	157,649	29,445	750	335	8.33	32.57	92.80	30.35
1993	205,883	46,937	1,118	346	30.60	59.41	49.07	3.28
1994	231,368	57,323	1,595	429	12.38	22.13	42.67	23.99
1995	310,741	64,032	2,953	736	34.31	11.70	85.14	71.56
1996	346,978	74,649	3,526	939	11.66	16.58	19.40	27.58
1997	438,949	86,347	4,908	**601**	26.51	15.67	39.19	-36.00
1998	616,619	82,615	3,659	**376**	40.48	-4.32	-25.45	-37.44
1999	865,487	105,621	3,061	**470**	40.36	27.85	-16.34	25.00
Avg. % Change					**18.77%**	**16.98%**	**0.94%**	**27.01%**
2000	1,387,953	146,067	3,109	**322**	60.37	38.29	1.57	-31.49
2001	817,574	111,854	4,082	**485**	-41.09	-23.42	31.30	50.62
2002	678,751	94,383	4,510	**798**	-16.98	-15.62	10.49	64.54
2003	559,579	107,120	5,611	**950**	-17.56	13.50	24.41	19.05
2004	648,146	147,545	7,005	**1,524**	13.67	27.40	19.99	60.42
Avg. % Change					**-3.19%**	**3.19%**	**16.94%**	**32.63%**

Source: World Bank CD-ROM(2005) and WIR-2000-05, Surveys of Pakistan (1970-2005),
BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)
ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)
WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)

Table 2.3

Various Countries % share of FDI flows to Pakistan (1980-2004)

Year	USA	UK	UAE	Germany.	Fran.	HK, China	Italy	Japan	Saudi Arabia	Canada	Netherlands	Others
1970	-	-	-	-	-	-	-	-	-		-	-
1971	-	-	-	-	--	-	-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-	-	-	-	-
1980	-	-	-	-	-	-	-	-	-	-	-	-
1981	15.5	19.9	8.4	3.6	0.19	0.15	0.02	0.43	0.23	0.3	1.52	49.8
1982	11.6	16.9	10	3.3	0.23	0.06	0.01	0.5	2.6	0.23	3.34	51.3
1983	8.8	16.3	8.2	4.8	0.1	0.51	-	0.45	2.5	0.21	1.35	56.8
1984	24.5	12.7	16.9	9.1	1.71	0.85	0.14	9.53	5.4	0.43	9.71	9.1
1985	24.2	8.6	47.9	2.9	0.55	1.9	0.27	4.33	-5	-	0.89	13.5
Average	**16.92**	**14.88**	**18.28**	**4.74**	**0.556**	**0.69**	**0.11**	**3.048**	**1.146**	**0.2925**	**3.362**	**36.1**
1986	39.7	4.7	23.7	5	1.39	6.2	0.37	8.7	0.92	0.74	0.55	8
1987	28.2	15.7	15	11.3	3.08	3.39	0.67	8.38	0.55	0.62	0.25	12.8
1988	45.1	10.8	6.2	4.8	3.68	3.01	0.57	8	0.24	0.43	0.81	16.3
1989	43.4	10.5	7.3	5.2	2.77	0.42	1.75	7.45	0.51	0.42	2.45	17.8
1990	52.8	13.7	3.7	5.1	2.88	1.34	1.18	10.65	0.36	0.77	0.93	6.6
Average	**41.84**	**11.08**	**11.18**	**6.28**	**2.76**	**2.87**	**0.908**	**8.636**	**0.516**	**0.596**	**0.998**	**12.3**
1991	63.7	6.1	3.1	6.4	2.53	-	0.59	5.28	0.03	0.9	0.24	11.1
1992	44.7	8.4	3.1	11.8	1.98	4.05	0.19	7.18	2.67	0.09	1.83	14.1
1993	32.2	9	2.1	2.6	3.13	0.34	0.08	8.38	0.54	0.34	-0.03	41.3
1994	39.9	8.7	10.6	4	3.05	0.49	0.06	3.68	0.2	0.09	1.02	28.2
1995	29.3	29.1	4.8	2.4	1.28	3.11	0.04	7.52	2.46	0.07	1.09	18.8
Average	**41.96**	**12.26**	**4.74**	**5.44**	**2.394**	**2**	**0.192**	**6.408**	**1.18**	**0.298**	**0.83**	**22.7**
1996	36.1	35.2	8	2.6	1.5	1.1	0.26	5.37	-2.49	0.25	0.1	11
1997	42.7	22.5	3.2	4	0.8	0.3	0.1	3	0.2	0.1	4.5	18.6
1998	45.4	18.9	1.5	4.2	2.1	0.6	0	12.5	4.8	0.1	1.2	8.6
1999	35.5	36	1.2	2.2	0.3	0.2	0.1	3.8	6.1	0	2.3	12.3
2000	28.8	28.1	1.6	4.8	0.2	1	0.4	3	17.6	0	0	14.5
Average	**37.7**	**28.14**	**3.1**	**3.56**	**0.98**	**0.64**	**0.172**	**5.534**	**5.242**	**0.09**	**1.62**	**13**
2001	67.3	6.3	4.4	2.3	-1.4	0.6	0	1.3	0.3	0.7	0	18.2
2002	26.5	27.5	15	0.5	0.3	0.7	0	1.8	5.5	0.1	0	22.1
2003	25.11	6.84	14.18	0.74	-0.59	0.66	0.2	1.59	0.76	0.05	0	50.46
2004	21.04	11.9	24.1	0.9	-0.2	2.1	0	3	1.2	0.1	0	35.86
2005												
Average	**34.99**	**13.14**	**14.42**	**1.11**	**-0.47**	**1.02**	**0.05**	**1.92**	**1.94**	**0.24**	**0.00**	**31.66**

Source: World Bank CD-ROM(2005) and WIR-2000-05, Survey of Pakistan (1970-2005),

BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)

ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)

WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)

(http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

Table 2.4

Sectoral FDI flows as % of Total FDI flows to Pakistan (1980-2004)

Year	Agri, forestry, Hunting, fishing	Mining & Quarrying	Manufact Textile/Cement /Sugar	Construction	Utilities	Commerce	Transport, Storage & Comm	Others
					Power, Gas & others	(Trade, Finance)		
1970	-	-	-	-	-	-	-	-
1971	-		-	-	-	-	-	-
1972	-	-	-	-	-	-	-	-
1973	-	-	-	-	-	-	-	-
1974	-	-	-	-	-	-	-	-
1975	-	-	-	-	-	-	-	-
1976	-	-	-	-	-	-	-	-
1977	-	-	-	-	-	-	-	-
1978	-	-	-	-	-	-	-	-
1979	-	-	-	-	-	-	-	-
1980	-	24.6	74.6	1.3	-	1.8	0.5	2.8
1981	0.5	18.9	60.2	0.46	-	-3.8	1.3	22.4
1982	0.15	24.5	74.6	0.41	-	-1.1	0.3	1.1
1983	0.28	44.3	26	0.43	-	2.2	2	4.5
1984	0.27	4.3	54.7	0.15	-	29.4	2.1	9.1
1985	1.85	17.9	33.5	0.3	-	37.4	1.7	7.6
Average	**0.61**	**21.98**	**49.8**	**0.35**	**#DIV/0!**	**12.82**	**1.48**	**8.94**
1986	0.4	27.8	26.4	0.01	0.05	37.3	3.6	4.4
1987	0.03	56.7	9.8	-	0.05	25.6	2.5	5.4
1988	-	48.8	11.7	-0.15	0.18	30.9	5.2	3.3
1989	1.18	55.1	8.6	9.04	-	19.5	4.7	1.9
1990	-	34.4	8.7	10.66	0.02	38.9	5	2.4
Average	**0.54**	**44.56**	**13.04**	**4.89**	**0.08**	**30.44**	**4.20**	**3.48**
1991	-	45.5	16.2	5.18	0.07	33.2	-1.1	0.9
1992	-	4.1	11.9	36.31	9.59	34.4	-0.3	3.9
1993	-	9.8	11.1	17.38	0.01	61.1	0.2	0.3
1994	0.28	4.6	35	10.68	31.74	13.5	2	2.1
1995	-	-	-	-	-	-	-	-
Average	**0.28**	**16.00**	**18.55**	**17.39**	**10.35**	**35.55**	**0.20**	**1.80**
1996	15.2	5.5	9	2.1	35.9	15.6	0.9	15.5
1997	15.2	16.5	5	3.6	39.8	5.6	1.7	12.3
1998	13.1	23.9	0.8	2.9	27.8	6.4	7.1	10
1999	36.1	17	2.2	4.5	14.3	7.9	6.6	8.8
2000	22.2	26.3	6.1	3.9	12.5	-6.7	25.3	7.9
Average	**20.36**	**17.84**	**4.62**	**3.40**	**26.06**	**5.76**	**8.32**	**10.90**
2001	2.6	56.7	3.9	2.6	7.5	7.8	7.3	10.6
2002	12.5	23.6	3.5	2.2	4.1	30.9	14.3	8.6
2003	3.47	21.43	3.97	3.37	-1.49	29.25	24.29	7.96
2004	7.6	12.8	3.7	2.8	4.8	21.1	34.9	10.8
Average	**6.54**	**28.63**	**3.77**	**2.74**	**3.73**	**22.26**	**20.20**	**9.49**

Source: World Bank CD-ROM(2005) and WIR-2000-05, Survey of Pakistan (1970-2005),

BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)

ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)
WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)
(http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

[1] Ashfaque H. Khan and Yun-Hwan Kim (july-1999) EDRC REPORT

Table-2.5

FDI Stock 1970 – 2004 (US $ millions)

World, Developed and Developing economies, Asia, South Asia, & Pakistan

Year	World	Developed	Developing	Asia	South Asia	Pakistan
1970	451470	210654	240882	201346	196095	544
1971	464502	220131	244437	202158	196739	545
1972	478404	230748	247723	202823	197342	562
1973	493523	242252	251336	204236	198537	562
1974	514237	257775	256528	205355	199591	566
Average	**480427**	**232312**	**248181.2**	**203184**	**197660.8**	**555.8**
1975	540140	279470	260736	203491	201082	591
1976	566755	296441	270380	207959	202939	599
1977	587848	311865	276043	209193	204495	614
1978	614854	332103	282805	212266	206183	646
1979	649341	357426	291945	216104	208246	704
Average	**591788**	**315461**	**276381.8**	**209803**	**204589**	**630.8**
1980	692714	390740	301974	218320	211039	767
1981	744905	420848	324057	233085	218859	701
1982	796070	444512	351558	252383	226634	652
1983	833084	463945	369138	264815	233775	794
1984	874639	490679	383960	277991	241361	677
Average	**788282**	**442144.8**	**346137.4**	**249319**	**226333.6**	**718.2**
1985	972205	569696	402460	287330	249960	1079
1986	1113539	690290	423195	297929	259226	1298
1987	1314793	858466	456270	315888	278402	1351
1988	1475718	992751	481361	334188	295903	1257
1989	1691779	1176176	513444	353843	315074	1422
Average	**1313607**	**857475.8**	**455346**	**317836**	**279713**	**1281.4**
1990	1950303	1399509	547965	378002	337082	1928
1991	2113411	1512955	593833	400300	357150	2088
1992	2158861	1502273	645179	430277	384248	2658
1993	2329052	1595682	715640	486352	435243	2546
1994	2617192	1788269	804842	557728	503896	3878
Average	**2233764**	**1559737.6**	**661491.8**	**450532**	**403523.8**	**2619.6**
1995	2992068	2035799	916697	636465	581012	5552
1996	3316433	2204853	1059285	731949	671345	6646
1997	3615045	2315660	1225726	818074	748462	9156
1998	4278736	2812484	1371887	896962	817504	8779
1999	5113857	3260017	1745553	1158298	1075415	7891
Average	**3863228**	**2525762.6**	**1263829.6**	**848350**	**778747.6**	**7604.8**
2000	5786029	3976356	1939926	1283082	1195687	7753
2001	6197711	4265471	2071979	1320721	1226736	6799
2002	6703607	4810641	2093569	1358005	1259136	7043
2003	7987077	5816292	2280171	1461518	1352409	7163
2004	8902153	6469832	2232868	1300652		8224
Average	**7115315**	**5067718.4**	**2123702.6**	**1344796**	**1258492**	**7396.4**

Source: World Bank CD-ROM(2005) and WIR-2000-05, Survey of Pakistan (1970-2005),

BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)

ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)
WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)
(http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

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Table-2.6

FDI Stock Growth rates 1970 – 2004

World, Developed and Developing economies, Asia, South Asia, & Pakistan

Year	World	Developed	Developing	Asia	Saouth Asia	Pakistan
1970						
1971	2.89	4.50	1.48	0.40	0.33	0.18
1972	2.99	4.82	1.34	0.33	0.31	3.12
1973	3.16	4.99	1.46	0.70	0.61	0.00
1974	4.20	6.41	2.07	0.55	0.53	0.71
Average	**3.31**	**5.18**	**1.59**	**0.49**	**0.44**	**1.00**
1975	5.04	8.42	1.64	-0.91	0.75	4.42
1976	4.93	6.07	3.70	2.20	0.92	1.35
1977	3.72	5.20	2.09	0.59	0.77	2.50
1978	4.59	6.49	2.45	1.47	0.83	5.21
1979	5.61	7.63	3.23	1.81	1.00	8.98
Average	**4.78**	**6.76**	**2.62**	**1.03**	**0.85**	**4.49**
1980	6.68	9.32	3.44	1.03	1.34	8.95
1981	7.53	7.71	7.31	6.76	3.71	-8.60
1982	6.87	5.62	8.49	8.28	3.55	-6.99
1983	4.65	4.37	5.00	4.93	3.15	21.78
1984	4.99	5.76	4.02	4.98	3.25	-14.74
Average	**6.14**	**6.56**	**5.65**	**5.19**	**3.00**	**0.08**
1985	11.16	16.10	4.82	3.36	3.56	59.38
1986	14.54	21.17	5.15	3.69	3.71	20.30
1987	18.07	24.36	7.82	6.03	7.40	4.08
1988	12.24	15.64	5.50	5.79	6.29	-6.96
1989	14.64	18.48	6.67	5.88	6.48	13.13
Average	**14.13**	**19.15**	**5.99**	**4.95**	**5.49**	**17.99**
1990	15.28	18.99	6.72	6.83	6.99	35.58
1991	8.36	8.11	8.37	5.90	5.95	8.30
1992	2.15	-0.71	8.65	7.49	7.59	27.30
1993	7.88	6.22	10.92	13.03	13.27	-4.21
1994	12.37	12.07	12.46	14.68	15.77	52.32
Average	**9.21**	**8.94**	**9.43**	**9.58**	**9.91**	**23.86**
1995	14.32	13.84	13.90	14.12	15.30	43.17
1996	10.84	8.30	15.55	15.00	15.55	19.70
1997	9.00	5.03	15.71	11.77	11.49	37.77
1998	18.36	21.45	11.92	9.64	9.22	-4.12
1999	19.52	15.91	27.24	29.14	31.55	-10.12
Average	**14.41**	**12.91**	**16.87**	**15.93**	**16.62**	**17.28**
2000	13.14	21.97	11.14	10.77	11.18	-1.75
2001	7.12	7.27	6.81	2.93	2.60	-12.30
2002	8.16	12.78	1.04	2.82	2.64	3.59
2003	19.15	20.90	8.91	7.62	7.41	1.70
2004	11.46	11.24	-2.07	-11.01	-100.00	14.81
Average	**11.80**	**14.83**	**5.16**	**2.63**	**-15.23**	**1.21**

Table- 2.7

FDI Stock in Pakistan as % of Global Regions and Economies, 1970 - 2004
World, Developed and Developing economies, Asian and South Asian regions

Year	Pakistan	% World	% Developed	% Developing	% Asia	% South Asia	
1970	544	0.12	0.26	0.23	0.27	0.28	
1971	545	0.12	0.25	0.22	0.27	0.28	
1972	562	0.12	0.24	0.23	0.28	0.28	
1973	562	0.11	0.23	0.22	0.28	0.28	
1974	566	0.11	0.22	0.22	0.28	0.28	
Average		**0.12**	**0.24**	**0.22**	**0.27**	**0.28**	
1975	591	0.11	0.21	0.23	0.29	0.29	
1976	599	0.11	0.20	0.22	0.29	0.30	
1977	614	0.10	0.20	0.22	0.29	0.30	
1978	646	0.11	0.19	0.23	0.30	0.31	
1979	704	0.11	0.20	0.24	0.33	0.34	
Average		**0.11**	**0.20**	**0.23**	**0.30**	**0.31**	
1980	767	0.11	0.20	0.25	0.35	0.36	
1981	701	0.09	0.17	0.22	0.30	0.32	
1982	652	0.08	0.15	0.19	0.26	0.29	
1983	794	0.10	0.17	0.22	0.30	0.34	
1984	677	0.08	0.14	0.18	0.24	0.28	
Average		**0.09**	**0.16**	**0.21**	**0.29**	**0.32**	
1985	1079	0.11	0.19	0.27	0.38	0.43	
1986	1298	0.12	0.19	0.31	0.44	0.50	
1987	1351	0.10	0.16	0.30	0.43	0.49	
1988	1257	0.09	0.13	0.26	0.38	0.42	
1989	1422	0.08	0.12	0.28	0.40	0.45	
Average		**0.10**	**0.16**	**0.28**	**0.40**	**0.46**	
1990	1928	0.10	0.14	0.35	0.51	0.57	
1991	2088	0.10	0.14	0.35	0.52	0.58	
1992	2658	0.12	0.18	0.41	0.62	0.69	
1993	2546	0.11	0.16	0.36	0.52	0.58	
1994	3878	0.15	0.22	0.48	0.70	0.77	
Average		**0.12**	**0.17**	**0.39**	**0.57**	**0.64**	
1995	5552	0.19	0.27	0.61	0.87	0.96	
1996	6646	0.20	0.30	0.63	0.91	0.99	
1997	9156	0.25	0.40	0.75	1.12	1.22	
1998	8779	0.21	0.31	0.64	0.98	1.07	
1999	7891	0.15	0.24	0.45	0.68	0.73	
Average		**0.20**	**0.30**	**0.61**	**0.91**	**1.00**	
2000	7753	0.13	0.19	0.40	0.60	0.65	
2001	6799	0.11	0.16	0.33	0.51	0.55	
2002	7043	0.11	0.15	0.34	0.52	0.56	
2003	7163	0.09	0.12	0.31	0.49	0.53	
2004	8224	0.09	0.13	0.37	0.63	#DIV/0!	
Average		**0.11**	**0.15**	**0.35**	**0.55**	**#DIV/0!**	

Source: World Bank CD-ROM(2005) and WIR-2000-05, Survey of Pakistan (1970-2005),

BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)

ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)

WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf), (http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

[1] Ashfaque H. Khan and Yun-Hwan Kim (july-1999) EDRC REPORT

Table-2.8

FDI Stock by South Asian Host Economy, 1970 - 2004								
Year	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
1970	0	0	0		0	0	544	0
1971	0	0	0		0	0	545	0
1972	0	0	0		0	0	562	0
1973	0	285	0		0	0	562	0
1974	0	285	0		0	0	566	0
Average	**0.00**	**114.00**	**0.00**		**0.00**	**0.00**	**555.80**	**0.00**
1975	0	287	0		0	0	591	0
1976	0	292	0		0	0	599	
1977	0	299	0		0	0	614	
1978	0	307	0		0	0	646	
1979	0	299	0		0	0	704	
Average	**0.00**	**296.80**	**0.00**		**0.00**	**0.00**	**630.80**	**0.00**
1980	11	308	0	452	11	1	767	231
1981	11	313	0	544	11	1	701	300
1982	11	320	0	616	4	1	652	397
1983	11	320	0	621	4	1	794	425
1984	11	320	0	641	2	1	677	463
Average	**11.00**	**316.20**	**0.00**	**574.80**	**6.40**	**1.00**	**718.20**	**363.20**
1985	11	313	0	747	3	2	1079	517
1986	11	316	0	864	9	3	1298	542
1987	12	319	0	1077	14	5	1351	605
1988	12	321	0	1168	15	5	1257	618
1989	12	321	0	1420	19	6	1422	638
Average	**11.60**	**318.00**	**0.00**	**1055.20**	**12.00**	**4.20**	**1281.40**	**584.00**
1990	12	324	2	1657	25	12	1928	681
1991	12	326	2	1732	31	14	2088	748
1992	12	329	2	1984	38	18	2658	871
1993	12	343	2	2516	45	24	2546	1065
1994	12	355	2	3490	54	31	3878	1232
Average	**12.00**	**335.40**	**2.00**	**2275.80**	**38.60**	**19.80**	**2619.60**	**919.40**
1995	12	356	2	5641	61	39	5552	1297
1996	13	535	4	8166	70	58	6646	1430
1997	11	988	3	10630	82	81	9156	1863
1998	11	1445	3	14065	93	93	8779	2013
1999	17	1715	4	15426	105	97	7891	2214
Average	**12.80**	**1007.80**	**3.20**	**10785.60**	**82.20**	**73.60**	**7604.80**	**1763.40**
2000	17	2429	3	17517	119	97	7753	2389
2001	18	2522	4	20326	130	116	6799	2471
2002	19	2574	4	25408	142	118	7043	2668
2003	19	2695	4	30827	154	148	7163	2897
2004								
Average	**17.16**	**2245.56**	**3.64**	**20972.72**	**125.44**	**110.52**	**7272.56**	**2437.68**

Source: World Bank CD-ROM(2005) and WIR-2000-05, Survey of Pakistan (1970-2005),

BOI Pak-2005 (http://www.pakboi.gov.pk/Biz_Guide/investment_indicators.html)

ADB-2005 (http://www.adb.org/Documents/Books/Key_Indicators/2005/xls/rt23.xls)
WIR-2004 (http://www.unctad.org/en/docs/wir2004_en.pdf)
(http://www.unctad.org/en/docs/wir2005annexes_en.pdf)

[1] Ashfaque H. Khan and Yun-Hwan Kim (july-1999) EDRC REPORT

Chapter-3
Alternative Philosophical Motivations Influencing FDI Transactions

3.1 Introduction

In this chapter the traditional, neo-classical (western) motivation for foreign direct investment is compared with that of Islamic economics. To a considerable extent the differences revolve around the different theories of interest and the illegality of debt-finance in Islam. A wider contrast is apparent, however, in that Islamic economics takes a broader view of economic and social relations than does market-oriented, neo-classical economics and so some of the wider social aspects are also considered in this chapter.

In general terms, the investment philosophy requires an integration of economic analysis and political analysis that seeks to achieve the maximum total return consistent with the minimum acceptable risk. Monitoring the current economic environment and identifying the factors that affect the future direction of the economy provides the framework for intelligent investment. Monetary policy is significant for short-term portfolio investment. However, long-term economic factors including demographics, technological innovation and changing political structures can influence direct investment in a country. The process of identifying and assessing the influencing factors is an integral part of investment decision-making.

The economic and political risk of the host country is one of the important determinants in investment decision-making and due to the belief that unpredictability and volatility in the political environment of the host market increases the perceived risk and uncertainty experienced by the firm.

FDI in its definition and philosophy is a type of equity partnership, either in full or partially, which conforms to the basic principles of the Islamic financial system, asking the investors either to go for a joint venture, risk-sharing partnership (*Musharka*) or a profit-sharing partnership (*Mudarabah*) (Al-Suwailem 1998).

3.2 Traditional Neoclassical Approach to Direct Investment (FDI)

This type of investment can be defined as a long-term investment with the purpose of acquiring a management stake in the company or having total control of the assets of the company. Though the profit-seeking group of investors undertakes this type of investment, it has additional developmental effects on the economy of the host country. This type of investment may take place through purchases of shares and the loan capital security markets, greenfield FDI, mergers and acquisitions or through the privatisation of state industry in the host country.

In a world of perfect markets, the multinational enterprises (MNEs) would not exist and there would be no FDI[4]. According to the Hymer-Kindleberger (1969) theory, the foreign-owned firm would make an investment in the host country only if it possesses some compensatory advantage that allows it to compete on equal terms with indigenous firms. This is, however, not a sufficient condition for FDI since the firm has the option of licensing the advantage (technology) to an indigenous producer or exporting the product to the host country. Clearly, certain other conditions have to be satisfied for FDI to arise. Three such conditions are:

(i) The advantage is internally transferable (it can be exploited by a subsidiary of the parent firm without any additional cost to the parent firm or to the subsidiaries already exploiting it);

(ii) It is more profitable for the foreign-owned firm to exploit the advantage itself than to license it to an indigenous producer (because of imperfections in the market for knowledge or the heavy firm-to-firm transfer costs of the advantage);

(iii) Exporting the product to the host country is not possible or unprofitable due to tariff or transport cost barriers.

According to Golder and Ishigami (1999), theories of FDI also assert that the basis for such investment lies in the transaction costs of transferring technical and other knowledge, and market imperfections. This is closely related to the internalisation of markets hypothesis, which, according to Buckley and Casson (1991), is the most important reason for FDI and transnational corporations (TNCs). The theory of TNCs is composed of three main features:

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[4] http://www.epw.org.in/34-22/rm1.htm

1: Maximization of profit by the firms through imperfect markets in the world.

2: Creation of inter-markets within the firms by bypassing the imperfect markets.

3: Internalisation of markets across national boundaries generates MNEs.

According to Buckley and Casson (1991), the theory emphasises lower transport costs, high returns to scale at the plant level, and a significant comparative advantage at least one location. Then international acquisition and exploitation of knowledge will normally be able to involve international production through a worldwide network[5].

According to Dunning (1993), Ownership, Location and Internationalization (OLI) can answer three basic questions for FDI cross-border mergers and acquisitions. Also the two basic motivation factors, growth and change in the economic environment in the area of technology and capital market changes, are very important for the conduct of cross-border mergers and acquisitions. The Dunning (1993) OLI model sets out which, where and why firms go for cross-border mergers and acquisitions.

The proprietary ownership (O) motive encourages firms to invest abroad in foreign firms. The firms avail themselves of this advantage to overcome the extra costs of operating in other areas where they are less familiar with the environment and which may be costly. In some cases, according to Dunning (1993), firms may go overseas to supplement or enhance their existing "O" assets (seeking FDI) seeking synergies between their own strengths and those of foreign firms or institutions.

According to Dunning (1993), firms select sites "L" that best match the deployment of "O" assets. The location theory plays a major role in the cost factors like transport cost, market size and government policies such as stability, tariffs, taxes and regulations for FDI. He further explains that the asset-seeking FDI is drawn to locations with strong technological, educational or information creation activities. The internalization ("I") analysis draws on the transaction cost theories of the firm, and centres on the feasibility of and returns from contracting the sale of intangible

[5] http://www.epw.org.in/34-22/rm1.htm

advantages to other firms. Dunning (1993) further explains that internalization can also explain vertical FDI where a particular process or function is located abroad by TNCs to serve their production system.

Finally, it is concluded that it is useful to consider the OLI factor specifically for mergers and acquisitions and to distinguish mergers and acquisitions from other types of investment. So mergers mainly internalise to take advantage of "O" to gain economies of synergy, size, and scope. On the other hand, acquisitions are taken to involve larger, more powerful firms taking over smaller or weaker ones to gain speedy access to the latter's ownership and location. The OLI factor is explained better in vertical, horizontal and conglomerate mergers and acquisitions[6].

The underlying motivations are concerned with profit-making by international externalities and reducing the transaction costs incurred by markets. There are no explicit social and political factors involved in the decision (Kobrin, 1977). Kobrin (1977) also emphasises the culture-changing effect of foreign investment. The aspect of the culture transferred tends to be diffused throughout the host society by the reemployment of trained personnel, backward and forward linkages and competitive emulation.

3.3 Islamic Economic Concept of Investment (FDI)

According to the Islamic economic and financial system, an interest-based debt financing arrangement is not permissible but it allows investment institutions based on equity and economic justice. Chapra argues that the Islamic financial system mainly consists of a mechanism of two filter systems: the moral and market prices (Chapra 2000). The explicit inclusion of the moral dimension is in direct contrast to neo-classical FDI.

According to the Islamic finance literature, it has been defined that any excess earnings on money capital is *riba*, which is prohibited regardless of the rate of interest, purpose of the loan, and the terms and conditions of the transaction. Islam makes no distinction

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[6] WIR-2000 P # 140 to 152

between interest and usury, nor does it make any distinction between consumption and production loans, insofar as the prohibition on *riba* is concerned (Ariff 1988).

The Islamic ban on interest does not mean that capital is costless in an Islamic system. Islam recognizes capital as a factor of production, but it does not allow the factor to make a prior or predetermined claim on the productive surplus in the form of interest.

This obviously poses the question as to what will then replace the interest rate mechanism in an Islamic framework. There have been suggestions that profit-sharing can be a viable alternative (Kahf 1982a and 1982b). Presley (1994) illustrated the potential impact of the Islamic doctrine on Western economic relationships by focusing on the prohibition of interest (*riba*) in Islamic economics. Presley also showed that the alternative method of financier remuneration (i.e. '*Mudharabah*' or profit-loss sharing) would, under certain conditions, enhance capital investment on account of its ability to act as an efficient revelation device. The ideas developed in the Western contract literature show that a Mudharabah contract between the manager of a project and a syndicate of investors may permit a more efficient revelation of any informational asymmetries between the two.

The following sections give a brief discussion of types of investments that can be practised according Islamic Economic and Financial Laws.

1: *Mudharabah* (Trustee Partnership)

This is a type of business arrangement between two parties where one party supplies capital and the other provides labour and managerial services. Profits are shared between the two parties at agreed-upon terms, but the entire loss is borne by the supplier of capital (financier). During the early stages of Islam, the trade relations between the Prophet Mohammad and Khadijah are said to have been of the same nature. The Prophet Mohammad travelled long distances with trade caravans, selling goods belonging to Khadijah and getting his share of the profits.

A necessary condition for setting up a *mudharabah* is that the capital offered by the financier must be expressed in monetary units and the share of profit going to either party must not be a fixed amount. Profits must be distributed between the two parties on the basis of an agreed-upon ratio (Iqbal 1995).

Mudharabah may be organized in many forms, meeting the needs of today's business environment. For example, two parties may make an arrangement such that the financier bears the business risk, receives the entire profits and pays commission to the other party as a compensation for labour and managerial services.

A *mudharabah* may also assume the form of a business corporation if its shares are sold to the general public and the financiers form a Board of Directors that formulates a broad-based policy for the operation of the business and makes decisions regarding distribution of profits among shareholders. The other party, called management, is responsible for the business operations, procurement of raw materials, hiring and firing of labour, marketing of goods, etc. Depending upon the type of contract, the management would be entitled to compensation such as wages, salaries or commissions. This type of *mudharabah* appears to be closer to a modern incorporated business, which is the most dominant form of business organization in America today.

However, despite this apparent similarity, a corporation-type *mudharabah* would be very different from a western business corporation. It would neither be allowed to borrow nor to lend funds on the basis of interest. Western corporations, and in fact all Western businesses, are heavily involved in interest-based lending and borrowing activities. A significant increase in debt financing has been a major cause of many business failures during the past two decades. Since, in this system, creditors of the firm are entitled to interest payment on the capital they supply, all business risk is diverted to the equity holders. This arrangement violates Islamic principles of fairness and distributive justice. Moreover, the stock market, which is assumed to play an important function in determining the value of the firms whose stocks are traded in the market, has turned into a place for speculation, hostile takeovers and insider-trading thus introducing fraud, treachery and lies into the economic system. If the creation of a

corporation-type *mudharabah* necessitates the establishment of a stock market and speculation (gambling), it cannot be considered lawful in Islam (Also see appendix 3.1).

2: Musharakah (Joint Venture) or Venture Capital

A Musharakah is a business arrangement based on the concept of Profit and Loss Sharing (PLS). In this arrangement, two or more parties sign a contract to combine their efforts, in the form of physical and financial resources, to operate a business. In a Musharakah, profits are shared among the partners according to their level of participation but losses, if any, are borne by the suppliers of capital. Thus, Musharakah is another important business organization that ensures efficient allocation and distributive justice. There are many varieties of Musharakah such as *shirkat-e-mufawadha*, *shirkat-alinan*, *shirkat-e-sanai*, *shirkat-e-wujooh*, or *shirkat-e-milk*, which provide ways and means for financing different kinds of business and commercial activities. The capitalist system, which favours capital by relieving it from business risk, does not provide conditions favourable for the growth of Musharakah types of businesses.

From an Islamic point of view, venture capital is based on equity financing *sharikat ¢ inan*, and thus falls within the framework of Islamic finance. It therefore combines economic viability and Islamic preferences, which makes it a promising option for Islamic financial institutions. A venture capital firm manages funds provided by investors and directs them to the most promising ventures, mainly in the form of equity. Although the detailed practices of existing venture capital institutions may not be totally consistent with Islamic rules, these details can be easily modified without compromising the positive aspects of their underlying principles (Al Suwailm-1998).

3: Ijarah (Leasing)

By separating an asset's ownership rights from its use rights, the renting principle *Ijarah* makes use of an asset-independent form of financing. The owner of the asset bears all the risks associated with ownership and the user of the asset pays a fixed price (rent) for the benefits of the asset. One can, thus, use an asset without owning it. Therefore, *Ijarah* plays an important financial role.

In the early sixties, Al Sadr suggested the relevance of the *ljarah* principle in the management of a bank's assets; this principle remained insignificant until the emergence of Islamic banks. In recent literature (e.g., Chapra 1985, Council of Islamic Ideology 1981), the principle has been discussed thoroughly, however, it has not been widely used by Islamic financial institutions (Ahmad 1987) except by the IDB (see, particularly: 12th Annual Report of IDB).

Two variants of the *Ijarah* principle have been used in Pakistan: hire purchase and rent-sharing. In a hire-purchase form of finance, the client (the purchaser of an asset) knows the price of the asset, the bank's profits in the underlying sale transaction and the amount of rent to be paid. After paying the principal plus the profit and rents for the relevant period, the client assumes the ownership. In a recent opinion, the Islamic Fiqh Academy of the Organisation of Islamic Countries (O1C) has suggested refraining from the use of the hire-purchase principle unless appropriate care is taken with regard to the provision of such things as the extension of the lease period, the termination of the lease contract, the return of the asset to its owner and the purchase of the asset at the end of the lease contract. (see: The Islamic Fiqh Academy, 1989, p. 88).

In a rent-sharing contract, in addition to the principal, the client pays a known share of the market rent of the building until such time as he completes all payments. It is understood that the bank's profits in the operation are incorporated into the agreed rent.
In the conventional literature of economics and finance, a comparison of the renting principle (i.e., leasing and interest-bearing finance) is frequently undertaken and the superiority of the former is highlighted. In an interesting study, Al Masri (1986) has compared renting with the PSP and suggested that the PSP (whether based on output or profit-sharing) can also be applied to durable assets more efficiently than the renting principle.

Leasing of land, houses and commercial facilities has been a well-known business phenomenon for a long time. A lease is a contract between two parties such that the owner, called the "leasor", rents his assets to the other party called the "lessee" for use for an agreed-upon period on specified rental terms. The lessee is entitled to the use of the assets so long as he abides by the terms and conditions of the lease agreement.

4: Murabahah (Cost-plus Sale)

Since 1982 *murabahah* has emerged as a distinct principle of Islamic finance and has become the backbone of contemporary Islamic modes of investment. *Murabahah* is a sale/purchase agreement based on deferred payments with a mechanism of markup and markdown; it is also designed as a device for commercial financing, following Islamic principles. However, the financial institutions have been asked to avoid it as much as possible since it can be prone to interest-based business arrangements. The markup principle of finance results from incorporating deferred payments into *murabahah.* In the markup principle, the financier benefits from the difference between the immediate and deferred prices of the goods. The markup principle is justified on the basis of a generally accepted axiom that time may be valued provided it is incorporated in a sale transaction (Saadallah 1986).

The mark-up creates a fixed, predetermined and secure indebtedness. This has made the mark-up principle attractive for Islamic banks as an alternative to interest-based transactions. It should, however; be noted that in contrast to interest-based lending, the final return to the financier is not fixed in mark-up based financing. In fact the final return to the financier is lower than the mark-up price because of the element of risk carried by the financier while the merchandise is in his possession. By the same token, the mark-up principle removes from the user of the funds the risks which he would otherwise have borne had he owned the goods for the same period of time. Thus, the final cost of the finance for the finance user may be less than the mark-up price (Khan 1989).

During the time of the Caliphate of Umar, when Muslim traders started long-distance trading, the shrewd money lenders who used to be present at the trading centres in foreign countries would incorporate interest charges into the exchange rates. When these matters were brought to the notice of Umar, he told the Muslims to avoid anything that was doubtful. Some naive Muslim scholars use this example to try to make a distinction between interest and usury, justifying interest, which is charged at reasonable rates, and prohibiting usury because of its exorbitant rates.

3.4 A Comparison of Traditional and Islamic Investment

Investments, either domestic or foreign, bear two meanings usually used by economists in the theory of growth, income distribution or employment. Firstly, an international or domestic investment can be used to acquire assets physically or financially i.e. financial assets. In the non-technical definition of investments, one can speak of a simple acquisition of assets but in the macroeconomic sense the meaning of acquisition of assets can be different from that in the non-technical use of the term. Also, investment types can be either domestic or international.

Islamic investment is based on the type of contract made between the parties, the investor or borrower and the investor or lender. The legal form of an Islamic business enterprise or contract sheds light on how capital is raised, how labour is employed, how activities are remunerated, who makes decisions, how such enterprises or contracts are dissolved and who bears the risks of failure (Sarker 1999). While the traditional investment contracts are based on a debt instrument, which gives an impression of profit maximization for either the end borrower or lender, alternative "interest free" financing techniques based on the profit-loss sharing (PLS) principle (*Musharkah* and *Mudarabah* financing) and the markup principle (*Murabaha* and *Ijara* financing) have been developed by Islamic economists to conform with the rules governed by Islamic Shari'a principles. Both of the instruments of PLS can be thought of as equity instruments. The markup principle has its historical roots in commercial trade activities.

Although markup instruments are being used widely by the investment banks, they are considered to be disputed instruments due to the fixed return on investment. Many Islamic scholars have taken the position that markup techniques should be avoided or restricted fearing that the markup might open a back door to interest-based transactions (Siddiqi 1983 and Khan 1987).

Aggarwal and Tarik (2000) have stressed that, despite there being a formal equivalence in markup financing and debt, the equivalence is not based on the payment of interest. Following the literature on incomplete contracts by Hart and Moore (1998), he further argued that the handing over of assets to the debtor in the event of default was a salient

feature of debt contracts. Similarly, under markup the control rights are with the investment agency (debtor) as in a debt contract.

The Islamic jurists and economists have approved the *murabaha* investment, if it is made according to the approved methodology of contract. They further argue that it is a cost-plus contract since one party wishing to purchase equipment or goods and commodities approaches the other party to purchase those items who then sells to him at cost plus a declared profit. By this method of contract, a party needing finance to purchase business machinery or equipment gets the necessary finance on a deferred payment basis. Farmers may also get various inputs and agricultural implements from the bank on a deferred payment basis. The investment agency (bank) retains control of the assets (Sarker 1999).

Aggarwal and Tarik (2000) further argued about the viability of markup contracts in Islamic investment, saying that the immediate control of the assets in case of default will decrease the bankruptcy while, under traditional debt investments, the delays in the shifting of the assets to the investing agency (bank) can significantly decrease the efficiency of the investment. These problems are avoided under Islamic markup contracts.

In principle, in an Islamic economy the self-interest principle, which is the cornerstone of free traditional investment in market economies, is dramatically opposed. This clearly suggests that the object of an Islamic firm is not profit maximisation. Rather, the firm may be satisfied to realise a 'reasonable' or 'fair' level of profit if that enables it to achieve a more important goal (Metawally 1993).

The fixed nature of the return on capital is considered by most contemporary Muslim economists to be the unique characteristic of interest. As a corollary, therefore, the Islamic principle of financing is considered to be based on the variable rate of return (i.e., profit sharing). Therefore, *Mudarabah* has been treated by these scholars as a synonym for Islamic finance. This is perhaps the reason for neglecting the financing potential of the sale-based principle of finance and for the difference in this regard between interest and sale. As a result, Islamic economists tend to describe the Islamic

economy as debt free. However, the emergence of Islamic financial institutions has highlighted the immense financing potential of the sale-based principle where financing results in debt creation (Kahf & Khan 1992).

Kahf and Khan (1992) again tried to clarify the difference between the fixed nature of the return on capital invested in real transactions (sale) and on capital invested in pure finance (interest). They explained further that profit-sharing is the only Islamic principle of earning a return on capital invested in pure finance (where ownership is separated from management). However, as sale on a deferred basis serves the financial needs of the buyer and seller, it is no wonder that mark-up and renting principles have become the dominant practice of contemporary Islamic financial institutions.

3.5 The Islamic Concept of Contractual Uncertainty (Gharar)

Literally meaning fraud (al-khid'a), uncertainty (gharar) in transactions has often been used in the sense of risk, uncertainty and hazard, it consists mainly of uncertainty over the existence of the subject matter of contract or whether gharar basically consists of ignorance of the material attributes of the contract. When entering into a contractual relationship, there must be "full disclosure" by both parties because a transaction which is tainted with gharar will not be permitted. Any type of transaction where the subject matter, the price or both are not determined and fixed in advance will be viewed with suspicion under Shari'ah law (Kamali-1998)

Islamic financial system has prohibited taking a risk with Gharar (an investment decision full of uncertainty) (Vogal et al 1998). Warde (2000) explains that Islam strictly prohibits excessive risk-taking such as sales made under the high degrees of risk associated with uncertainty, speculation, uncertain outcome and unknowable future benefits. In such cases, it can be concluded that the risk lies within the meaning of Gharar. It can be defined as "the sale of what is not present". For example to sell fish that are still unfished or a bird that has not been hunted yet.

Islam requires certainty in contracts, and thus forbids transactions comprising an element of uncertainty relating to the object of the contract, its consideration or the time allowed for performance of the parties' respective obligations. In practice, the

prohibition of uncertainty, or risk, affects many fields of modern commercial transactions. For a start, insurance, as known in Western economies, is not permissible, since, at the time of concluding the contract, an insurer knows neither whether he will be called upon to make a payment to the insured, nor the extent of his exposure, Therefore, contracts of conventional insurance contravene the prohibition of gharar. Any system of insurance that do not conform to these standards (i.e. "commercial" insurance) are prohibited under the Shari'a. All investment projects in the insurance sector (which has been opened up to foreign investors by the recent Insurance law) must therefore be built on a "cooperative" structure.

Islamic law has found its own solution to gharar in insurance structures, creating a pool-like structure called Takaful. Takaful (i.e. cooperative insurance) consists of a charitable collective pool of funds in which "members" pool their resources to assist each other in the event of casualty or loss. Under this scheme, members promise to make periodic contributions, which are invested by the cooperative in an islamically conforming manner, and agree that if one of their numbers should suffer a covered loss, each will make a proportionate gift from his account, to cover the loss.

Another, rather obvious, aspect of the prohibition of gharar is the prohibition of financial transactions involving excessive risk. Futures, derivatives, hedge funds and swaps are all contracts which are tainted with gharar.

Islamic Financial system also prohibits speculation and gambling due to its excessive uncertainty of contract. For example, futures, options and swap contracts are not generally permissible because the return from such investments relies on the occurrence of events which may or may not take place and are therefore uncertain. An Islamic contract must be concluded by both parties with full knowledge of all the terms. Any type of transaction where the subject matter, the price or both are not determined and fixed in advance by the parties will not be permitted under Sharia'a.

The reason behind prohibiting gambling and the ambiguous contracts involving Gharar is due to the extremeness of risk and unfair distribution of risk in contracts (Badawi, 1998). A Gharar transaction is considered as a zero-sum game with uncertain payoffs since in this transaction one party loses while the other gains which helps the economist to view Gharar within the theory of exchange under uncertainty (Al-Suwailem 2000).

Gharar can be summarised to occur into four main varieties on account respectively of uncertainty and risk pertaining to the existence of the subject matter, or over its availability, uncertainty over the quantities involved, and lastly of uncertainty over timing of completion and delivery. First, should there be uncertainty over the actual existence of something at the time of contract; this would vitiate the contract according to the majority of jurists. The second variety of uncertainty (gharar) concerns a situation where a thing may exist, such as fish in the lake, but uncertainty surrounds over its availability at the time of contract. If there is only a slight doubt over availability, such as of fish in a small pond or of bird in a confined space, gharar arising from this kind of doubt is tolerated but excessive gharar over availability would vitiate the sale. The question of availability could also be actual or potential in that the object of sale although not available at the time of contract may become available later. The third of the four varieties of gharar mentioned above are concerned with uncertainty over quantity either of the subject matter or its price, or both. And lastly, uncertainty (gharar) over the timing of completion and delivery is largely addressed under the theory of ajal or deferment in contracts. Deferment is accordingly valid if it involves only one but not both of the counter values in a sale. The Islamic jurists have not specified any minimum or maximum limits for deferment in payment or delivery and there is some flexibility in the manner in which the time frame can be determined (Kamali-1998)

3.6 Conclusion

In the light of historical evidence from the early period of Islam and contemporary literature, a comparative review of Islamic financing principles has been presented in this chapter. Important points have been summarized at the end of each section. In the following, some general concluding remarks are made.

However, the emergence of Islamic financial institutions has highlighted the immense financing potential of the sale-based principle where financing results in debt creation. This clarifies the point that there is a difference between the fixed nature of return on capital invested in real transactions (sale) and on capital invested in pure finance (interest). It is, therefore, clear that profit sharing is the only Islamic principle of earning a return on capital invested in pure finance (where ownership is separated from management).

However, as sale on a deferred basis serves the financial needs of the buyer and seller, it is no wonder that markup and renting principles have become the dominant practice of contemporary Islamic financial institutions.

Recently, by emphasizing the characteristics of ownership in Islam and its combination with different forms of property management, it has been concluded that *Mudarabah* is a principle of pure finance whereas *musharakah,* like trading, is investment in real transactions.

Debt *(dayn)* has two primary sources: a non-market source (i.e., a loan) and a market source (i.e., a sale). The question of a return on non-market debt does not arise because the cause of the debt is a humanitarian consideration and the question of a return on debt created by sale does not arise because the return has already been incorporated into the price of the assets traded. Thus, once the debt is created, irrespective of its origin, the extension of its repayment period can only be non-economic in nature. A debt default does not improve the quality or quantity of the debt. Therefore, claiming a return for extending the repayment period is unnatural and illogical. The diversified nature of the principles of Islamic financing makes it capable of meeting the numerous financial needs of society.

In the developing countries, the capital structure of business and commerce has a very weak equity base, and hence it heavily depends on debt capital as a source of funds. The Islamic financial system looks at this issue in a much wider context. In an Islamic financial framework, there is no room for acquiring capital at a fixed and predetermined interest rate. It allows business arrangements in which the supplier of capital is required to assume the entire business risk.

By prohibiting interest earnings in any and all forms, Islam requires people to remain active, ready to supply labour, time and skills, or to offer capital for investment, thus assuming the business risk. One who earns interest income by supplying capital without assuming the business risk is declared unlawful by the Islamic financial system.

Under Islamic law, majority of jurists have analysed that Gharar is evidently a broad concept of uncertainty and risk-taking as well as excessive speculation and gambling, and ignorance over the material aspects of contracts. A certain degree of risk and ambiguity that has been deemed unacceptable in earlier times may not be seen in the same light under the contemporary market realities. There is thus a strong element of subjectivity and value judgment in gharar which has led to differences of opinion among jurists. The main dimensions of gharar are not likely to change with advances in technology and science simply because modem methods also bring with them uncertainties of a different order, which may be a cause of gharar no less serious than what we might have had without them. The complexities generated through the modes of transaction in banking and finance, stock markets and futures markets have brought with them more complex levels of uncertainty (gharar) that often require careful assessment and analysis. The basic modes of investment that Islamic law has provided are comprehensive enough to relate to all of these concerns and to the over-riding concern of all, which is to ensure fairness and prevent excessive uncertainty in contracts.

Appendix-3.1
Summary of Main Features of Islamic Financing Techniques[7]

Features	Techniques				
	Mudharabah (Profit Sharing)	**Musharakah (Profit Sharing)**	**Ijarah (Leasing)**	**Murabahah (Mark up-based)**	**Bay'al-salam (Mark up-based)**
Nature of Financing	Investment based Not obliged to pay back total amount of financing	Investment based Not obliged to pay back total amount of financing	Leasing Based Only rent is paid	Combination of trading and Debt Obliged to pay back the entire financing	Combination of debt and trading Not obliged to pay back total amount of financing
Role of Capital provide in management of funds	Nil	Full control	Full control	Full control	Nil
Risk bearing by the capital provider	To the full extent of capital as well as the opportunity cost of capital For the entire period of control	To the extent of proportion of capital in the total investment of the enterprise	Same as in Mudharabah Until the asset completes its life or it is disposed off	The full extent to the capital Only for a short period until the goods are purchased and taken over by the finance user	Same as in Mudharabah Even after the expiry of the contract until the goods are finally exposed off
Uncertainty of Rate of return	Complete uncertainty	Complete uncertainty	Complete uncertainty	Uncertainty only for a short period of contract	Complete uncertainty
Cost of Capital	Uncertain Ex-ante	Uncertain Ex-ante	Fixed and pre-determined	Fixed and pre-determined	Uncertain Ex-ante
Implications of Firm's financing choice	Between the two profit sharing methods, Musharakah has the edge over mudharabah as capital owner in the former case has the right to interfere in the management and have some control over problems created by informational asymmetry and moral hazard		Between the two fixed costs of capital techniques, Ijarah has the edge over Mudharabah as capital user in the former case is responsible only for the payment of the cost of capital and not responsible for capital goods itself		Bay'as-Salam provides the advantage to the seller of receiving cash advance and the buyer the benefits of lower cost of purchase

Curtsy, www.bradford.ac.uk/acad/management/ external/ pdf/ workingpapers/ 2005/ Booklet_05=15.pdf

[7] Adopted from Islamic Research and Training Institute (1991); Comparative of Some Islamic Financing Techniques, Jeddah, Saudi Arabia.

Chapter-4

Country Risk and Uncertainty

4.1 Introduction

Since the 18th century, the study of risk and uncertainty in the development and fulfilment of business and investment has been a major focus of traditional research and analysis by economists. They have tried to present different points of view on risk and to explain risk-taking in investment. Meanwhile, Islamic economists have put forward a different point of view based on the religious teachings of Islam. This chapter is an attempt to discuss the effect of religion on the investment decisions in the context of different theories concerning risk and uncertainty.

Generically, risk is the chance that something bad will happen and this is also a perfectly apt definition in the world of investing. This, however, leaves little room for measurement; risk in the context of investing simply refers to the variability of investment returns. Risk can also be defined as a measure of the potential inability to achieve the overall objectives of a program within a defined cost schedule and technical constraints and the possibility or chance of meeting danger, suffering loss, injury, etc. (Hornby 1986).

Lupton (1999) elaborates that changes in the meaning and use of risk are associated with the emergence of modernity beginning in the seventeenth century and gathering force in the eighteenth century. In modernity, risk, in its purely technical meaning, came to rely upon conditions in which the probability estimates of an event are able to be known or are knowable. Uncertainty, in contrast, can be used as an alternative term when these probabilities are inestimable or unknown. Risk and uncertainty tend to be treated as conceptually the same thing: for example the term 'risk' is often used to denote a phenomenon that has the potential to deliver substantial harm, whether or not the probability of harm occurring is estimable. So it can be said that risk is a very loose term in every day parlance. Such findings suggest that risk has definitely become more of a key word in the news media, used in the place of such words as 'danger', 'threats' and 'hazard'. Risk can also be defined as a socially constructed interpretation and

response to 'real' danger that objectively exists, even if knowledge about it can only ever be mediated through socio-cultural processes (Doglus 1995).

According to Webster's (1929) dictionary, risk is the "possibility of loss or injury." In investing, risk is the chance that the returns on a particular investment may vary. That's another way of saying that there are uncertainties when investing.

Most investors think of risk as the "chance of loss" or to quantify it, how much you could potentially lose for the potential gain. The basic rule of thumb in investing is the higher the risk, the higher the potential return; the lower the risk, generally the lower the return. There are also other risks associated with investing. These include risks such as investments that do not keep pace with inflation, or investments that experience unacceptable levels of volatility (fluctuations in value). According to Cool (1999) the meaning of risk was wrongly used in economics from 1921 until 1999 and he provided a different definition of risk. Cool argues that risk is neither uncertainty nor variance and also not the negative of 'expected revenue', but risk is the probability of loss (disease, death) but it can be defined as the absolute value of the probable loss.

No matter what an individual decides to do with their savings and investments, they will always face some risk. Even money hidden in a mattress or jam jar is vulnerable to the risk of being lost in a house fire or burglary. Money in the bank can lose buying power because of inflation over the years, leaving the investor with fewer dollars in real terms than when they made their deposit. Investing in stocks, bonds, or mutual funds also carries risks to varying degrees.

Strictly speaking, risk and uncertainty are not synonymous. Risk refers to a set of unique consequences for a given decision, which can be assigned probabilities, while uncertainty implies that it is not possible to assign probabilities (Pike *et al* 1986).

The word 'risk' originates from the French dictionary word '*risqué*' and was introduced in English in the mid seventeenth century. The word 'hazard' was common in the insurance business; it refers to the chance of loss or other event on which a claim may be made. For example, as no one can say for sure whether a particular building will

catch fire, most building owners do not operate on a sufficient scale to reduce the loss. Extend this base to cover the operations of a large number of persons and convert the contingency into a fixed cost to reduce the loss.

A *measurable* uncertainty, or 'risk' proper, is so far different from an *immeasurable* one that it is not in effect an uncertainty at all. We shall accordingly restrict the term 'uncertainty' to cases of the non-quantitative type. It is this 'true' uncertainty, and not risk, as has been argued, which forms the basis of a valid theory of profit and accounts for the divergence between actual and theoretical competition. The main concern here is the relationship between a known r*isk* and an u*ncertainty*.

According to Levy & Sarnat (1990), the term risk or equivalent uncertainty is used interchangeably to describe an option whose profit is not known in advance with absolute certainty, but for which an array of alternative outcomes and their probabilities are known. A risky investment is one in which the distribution of profit is known.

As stated above, uncertainty is an immeasurable risk. Thus there is a positive correlation between uncertainty and risk in that the former relates to the overall environment or framework and the latter corresponds to a particular event that may take place in that environment. The probability of certain outcomes can be elaborated through the example of tossing a coin, rolling a dice or drawing out a card from a pack of fifty-two. In tossing a coin the probability of heads or tails is 50 %. The probability will decrease if the number of possibilities is increased i.e. rolling a dice with numbers from one to six gives the probability of a six coming out in a throw as 16.67 %, similarly it is decreased if we have to draw a card in a solitaire game. The probability of one particular heart coming out in each pull decreases to 1.92 %.

Further, uncertainty can be used to describe the weather changes in the United Kingdom as compared to many other parts of the world where the weather remains the same for a couple of months at least. This uncertain change of weather also has great impact on economic decisions and development and the situation remains uncertain and also risky. Given the positive correlation between (immeasurable) uncertainty and risk, the former can be used in place of the word 'risk'. From a business point of view we can speak of

'risk of loss' and 'uncertainty of gain', the word 'risk' is ordinarily used in a loose way to refer to any sort of uncertainty viewed from the standpoint of the unfavourable contingency whilst the term 'uncertainty' is used with reference to the favourable outcome.

According to this differentiation, risk offers no profit whereas uncertainty does. Knight (1921) suggests employing "objective" and "subjective" probability to designate the risk and uncertainty respectively. So the practical difference between the two categories, risk and uncertainty, is that for risk, the outcomes in a group of instances are known (either through calculation *a priori* or from statistics of past experience), while in the case of uncertainty it is impossible to form a group of instances, because the situation dealt with is almost unique.

Following Knight, some economists differentiate between risk and uncertainty on the basis of measurable and immeasurable outcomes, respectively. In practice, however, the distinction between uncertainty and risk is blurred. That is why human attitude towards uncertainty and risk is similar. However, Adam Smith observes that human beings tend to differentiate between uncertainty and risk with respect to what is actually at stake. He states that men will readily risk a small amount in the hope of winning a large amount when the adverse probability (known or estimated) against winning is much in excess of the ratio of the two amounts.

Accordingly they will commonly refuse to incur a small chance of losing a larger amount for a virtual certainty of winning a smaller, even though the actuarial value of the chance is in their favour. We begin distinguishing between risk and uncertainty when we don't know what will occur in the future. Risk is 'uncertainty that matters' because it affects economic decisions. Thus, uncertainty is a necessary but not sufficient condition for risk. Every risky situation is uncertain but there can be uncertainty without risk (Bodie *et al* 2000).

As risk and uncertainty lie at the very heart of capital investment decisions and risk has implications for almost every economic activity, risk may be classified into a number of

types. A clear understanding of the different forms of risk can be helpful in the decision-making process of investing abroad (Pike *et al* 1986).

The term 'country risk' is often used in connection with cross border investments and analyzed from the foreign investor's perspective. The country risk for a given country is therefore the unique risk faced by foreign investors when investing in that specific country as compared to the alternative of investing in other countries. Country risk is the unique part of the investment's risk caused by the location within national borders. Country risk is often meant to measure the possibility of loss only, often called the downside risk. What we understand by the term country risk will to some degree depend on the type of investment. It is common to use three categories when describing foreign investments: lending, equity investment and foreign direct investment (FDI).

A country is a political entity, with country-specific rules and regulations applying to the investment. In addition to the specific regulations, e.g., laws protecting private property rights, a government's willingness and ability to change these rules and regulations will constitute a source of risk to the investment.

Political risk may also be caused by the behaviour of the state or state-owned companies in the market place, or by more extreme situations like war and civil unrest[8]. Jodice (1985) defined political risk as changes in operating conditions of foreign enterprises that arise out of the political process, either directly through war, insurrection, or political violence, or through changes in government policies that affect the ownership and behaviour of the firm. Political risk can be conceptualized as events, or a series of events, in the national and international environments that can affect the physical assets, personnel and operation of foreign firms.

4.2 Country Risk

Country risk is a broad concept that comprises an underlying combination of economics, finance, geopolitics, sociology and historical issues. As the new global economy raises the level of uncertainty and complexity for the international firm's

[8] When studying mainly financial assets such as stocks and bonds, the term country risk, and especially political risk, is in most cases used to describe the possibility of shocks in financial markets caused by some unforeseen event. The term *event risk* may also be used.

cross-border strategy, country risk analysis has today become an essential component of strategy decisions regarding export, investment, partnership, mergers and takeovers.

Along with the risks present in their domestic operations, institutions engaged in international activities are exposed to 'country risk' -- the risk that economic, social, and political conditions and events in a foreign country will adversely affect an institution's financial interests. In addition to the adverse effect that deteriorating economic conditions and political and social unrest may have on the rate of default by borrowers in a country, country risk includes the possibility of nationalization or expropriation of assets, government repudiation of external indebtedness, exchange controls and currency depreciation or devaluation.

Country risk has an over-arching effect on an institution's international activities and should explicitly be taken into account in the risk assessment of all exposures (including off-balance-sheet) to all public - and private sector - foreign-domiciled counterparties. The risk associated with even the strongest counterparties in a country will increase if, for example, political or macroeconomic conditions cause the exchange rate to depreciate and the cost of servicing external debt to rise.

Country risk is not necessarily limited to an institution's exposures to foreign-domiciled counterparties. Although it may not be feasible to incorporate the potential effect of country risk on domestic counterparties into an institution's formal country risk management process, country risk factors should nevertheless be taken into account, where appropriate, when assessing the creditworthiness of domestic counterparties. For example, a domestic borrower's credit risk might increase because of significant export receivables from a foreign country or because of the transfer-pricing of imports from a foreign affiliate. Country risk considerations would also be pertinent when one of the determinants of a transaction's value is a foreign country's foreign exchange or interest rate environment, as would be the case in an interest rate swap in which one rate is derived from a foreign country's yield curve.

Country risk is not limited solely to credit transactions. Investments in foreign subsidiaries, and other outsourcing arrangements with foreign providers all carry with

them the risk that policies or conditions in a foreign country may have adverse consequences for the institutions. Nowadays, such issues are more relevant around the world, since so-called globalization has led countries towards economic disclosures, essential for keeping them competitive.

Moreover, commodity and stock exchange markets are now linked through real time connections, which make the information flows faster and more efficient. So, all agents, investors, banks and companies are trying to improve their asset returns, taking advantage of the amazing international liquidity opportunities brought by the process of globalization. However, to some countries, such opportunities do not only mean increasing the investment return. They also represent additional risks from the increased volatility of returns. Within this highly sophisticated context, where the decisions are set in an effective global market, the country macroeconomic instabilities achieve amazing proportions as could be noticed during the financial and economic crisis. So, the evolution of international trade as well as the investment and financial programs development - due to the business set up, velocity and breadth - demand periodic improvements in risk methodology and analysis, especially the country risks that form the subject of this chapter.

A large portion of the past research on political and economic risks has focused on developing or testing various political and economic risk measures (Howell & Chaddick-1994). Some studies examined more specific country risks, such as the risk of terrorist threats (Harvey 1993). Others attempted to determine which risk factors affect foreign direct investment. One study sought to replicate *Euromoney's* and *Institutional Investor's* proprietary country risk ratings using the author's own model, which consisted of various macroeconomic and political risk variables. The researchers found that all three models predicted similar outcomes. In short, the results suggest that both magazines' ratings could be replicated to a significant degree with only a few widely available economic statistics (Coset & Roy1991).

A more recent study compared 1986 projections of *The Economist*, Political Risk Services and The Business Environment Risk Information (BERI) (now Business Environment Risk Intelligence) against business losses (defined through a rating

method developed by the authors) incurred between 1987 and 1992 (Howell & Chaddick 1994). Assuming that the risk measures (or indices) should correlate with losses in the period following the assessment, the authors assessed the adequacy of the indices by testing the correlation between the index data and the loss indicator. The results of their study indicate that, although a few variables were significantly correlated with speculative attacks, there are no clear early warning signals of currency crises (Eichengreen *et al* 1995).

Country risk is also considered a unique part of investment risk caused by the location within national borders. Country risk has often meant the measurement of loss only; hence it is also called the downside risk (Nordel 2001). Country risk analysis can also be a way to minimise the risk of uncertainty for new entrants into emerging markets. The managers can formulate their further strategies according to the country risk profile for the next three to five years with the scenario of the present economic and political situation of the country and also define country risk analysis as an advice and guidance measure for the new managers (Oetzel, *et al* 2001).

Country risk analysis is also an acknowledgement of the level of control of the national government over economic, political and regulatory issues, which play a major role in the stability of the country, to achieve the confidence of the international investors (Best 2002).

Country risk analysis as a unique subject can play a particular role in the changing of previous trends through internal and external events. Calverley (1988) considers political instability risk as an internal part of country risk and it can also be a determinant of economic growth in the long run. He also considers that global events can also be a major part of the country risk. Calverley (1988) has further elaborated six major rules to be looked into in the analysis of country risk. **First** to understand country risk it is necessary to look into the economic and political history of the present situation, which gives a basic idea of the international and domestic circumstances. **Second**, he considered it vital to look into the vulnerabilities of the country, even if the economic and political situation is favourable. **Third**, he recommends using scenario analysis and sensitivity techniques to identify these vulnerabilities. **Fourth**, he advises the consideration of the uncertainty factor in the judgement of country risk, as the degree of uncertainty is an important constituent of the country risk analysis. **Fifth**, he

asked the analysts to look into all of the factors affecting country risk individually as there is the possibility of misjudgement of the risk involved in the vulnerability of the country. Calverley adds that a country with a risk rating of 'B', a "moderately good risk", can very often be a "very good risk" but at the same time can have one major vulnerability. He has quoted the example of Iran with a very good risk level in all respects except the possibility of major political upheaval, which clearly changes the whole scenario. **Sixth**, in his conclusion, he identified ways to deal with uncertainty in order to spread the risk across countries and to balance the portfolio in terms of types of risks, for example oil producing countries or the aid-dependent countries.

The importance and effectiveness of country risk analysis is universally agreed throughout the literature as being the result of political, social and economic factors and that the three factors are highly correlated. Meldrum (2000) has also categorised country risk analysis into six major groups: economic risk, financial risk, exchange risk, geographical risk, sovereign risk and most important political risk, which overlap in interrelationship within the local economy through the local and international political system.

It has been recognized that the generation of interest in foreign investment by the multinational corporations is only due to the present importance and necessity of the foreign investment for economic development in the developing countries, which has been reported through different studies over different time spans (Hong *et al* 1999). Despite the importance of foreign investment for economic development, the MNCs still consider the political and law and order risk of the host country to be a major determinant in investment decision-making as the volatility and uncertainty of the host country increases the risk and uncertainty of the expected returns on the investment. It has also been widely recognized that both country-specific and global factors are important in explaining capital flows (Fernandez *et al* 1996 and Taylor *et al* 1997).

4.3 Types of Country Risk

Investment planning is almost impossible without a thorough understanding of risk. Before we discuss risk in detail, we should know the ways to handle risk. We can not

avoid risk completely but avoidance of some risk is deemed to be possible through the act of investing in "risk-free" investments.

Modern investment analysis categorizes risk into two general types: those that are pervasive in nature, such as market risk or interest rate risk, and those that are specific to a particular security issue, such as business or financial risk. Therefore, we must consider these two categories of total risk. We can arrive at a better understanding through the following process. Dividing total risk into its two components, a general (market) component and a specific (issuer) component, we have systematic risk and non-systematic risk, which are additive:

Total risk = General risk + Specific risk
= Market risk + Issuer risk
= Systematic risk + Non-systematic risk

1: Systematic Risk (Market Risk)

An investor can have a diversified portfolio to eliminate a part of the total risk, the non-market part. The second part of the risk is the non-diversifiable or the market risk. The first part of the risk is directly associated with overall movements in the market or economy and called the **systematic (market) risk.** Virtually all securities have some systematic risk, whether bonds or stocks, because systematic risk directly encompasses interest rate, market and inflation risks. The investor cannot escape this part of the risk because no matter how well he or she diversifies, the risk of the overall market cannot be avoided.

Some risks facing the company are not unique to that business in that market, but are faced by all firms operating in the broader, general marketplace. These so-called "systematic" risks, such as changes in interest rate levels, the performance and direction of the economy or the availability of certain types of skilled labour, cannot be avoided.

2: Non-systematic Risk

The risk not related to overall market variability is called the **non-systematic (non-market) risk.** This risk is unique and is associated with factors such as business and financial risk as well as liquidity risk. Although all investments tend to have some non-

systematic risk, non-market risk can be eliminated by diversification. This type of risk can also be called 'unique risk' or 'diversifiable risk'. The risks that are entirely unique to a company, products, buyers, promotional programs, billing, pricing, IT system and so on are non-systematic risks specific to an individual firm. Although there is little that can be done to avoid or mitigate exposure to systematic risk, it is possible to use various diversification strategies to offset risks that are unique to an individual business.

3: Economic Risk

Being a major constituent of the country risk analysis, economic risk is a fundamental element that produces major change in the expected risk and return of an investment which arises from changes in fundamental economic policy goals such as fiscal, monetary, and wealth distribution and creation, or via a significant change in a country's comparative advantage (e.g., resource depletion, industry decline, demographic shift). Economic risk often overlaps with political risk in some measurement systems since both are linked to policy (Meldrum 2000).

Analysts have been trying to formulate a relationship between country risk and the major economic factors effecting economic growth and the long-term perspective of investment. Along with the growth factors, the analysts have also examined fiscal policies, e.g. government expenditures (investment vs. spending as a percent of GDP), tax policy (types and rates of taxation, fairness, effectiveness vs. popular avoidance), and the government's debt situation (government deficit/GDP, total government debt/GDP, debt financing sources). Analysts also look into the major growth factors, free market policies, an open economy and other institutional factors (property rights, the degree of regulation and the extent of any black market) that affect long-term investments.

Calvo *et al* (1996) concluded that stable macroeconomic policies, labour market conditions, and exchange rate policies in many developing countries attracted more capital from the US during the 1980's. Calvo further added that one would expect that, as the governments of developing countries make macroeconomic and institutional reforms, international investors will gain confidence and be more willing to direct capital flows toward the new markets.

Alfaro *et al* (2004) also found a causal relationship between FDI and economic growth and conclude that FDI promotes growth through efficient financial markets.

4: Political Risk

Political risk is considered as a primary concern and an important part of country risk. Political risk can also be defined as a change in political institutions stemming from a change in government control, social fabric, or other non-economic factors. This category of risk also covers the potential for internal and external conflicts, expropriation risk and traditional political analysis. Risk assessment requires the analysis of many factors, including the relationships between various groups in a country, the decision-making process in the government and the history of the country. The political factor in the country risk analysis grew to be a major force during the 1970s after some radical changes in the political structure of the regions in countries like Iran and Nicaragua. Along with these major political changes another major concern for the country risk analysts is whether the military or a dictatorship or a democratic government is better from the risk standpoint.

Political risk can also be measured in a quantitative form. Measurement ranges from various classification methods (*type of political structure, range and diversity of ethnic structure, civil or external strife incidents*) to surveys or analyses by political experts. Most services tend to use country experts who grade or rank multiple socio-political factors and produce a written analysis to accompany their grades or scales. Company analysts may also develop political risk estimates for their business through discussions with local country agents or visits to other companies operating similar businesses in the country. In many risk systems, analysts reduce political risk to some type of index or relative measure. Unfortunately, little theoretical guidance exists to help quantify political risk, so many "systems" prove difficult to replicate over time as various socio-political events increase or decline in importance in the view of the individual analyst. The political risk has been defined as the implementation of the host government policies that directly affects the foreign investment to the country. Schmidt (1986) links the risk to subdivisions such as "transfer risk", "operational risk" and "ownership control risk" emphasising the risk of confiscation of assets.

For thousands of years, international traders and investors have considered that political decisions or events in a host country have an effect on the expected outcome of investment or trade with that country. This can be seen as an early form of political risk analysis.

Over approximately the last thirty years, the socio-political environment has been changing in different regions of the world. Sometimes, these political effects or even the radical political changes, have had a positive effect on the inflows of foreign investment into the country experiencing political changes. However, most of these changes have had an inverse affect on the inflows of foreign investment to the country due to the creation of an environment of uncertainty for the international investors (Llewellyn 1994).

Llewellyn (1994) also adds that the impact of politics on business operations has always been seen as negative. Expropriation, inconvertibility of profits, war damage, and damage from civil strife and breach of contract for political reasons have been the consequences of political interference. Kidnapping for ransom by guerrilla or other political groups is another means by which the investor may lose money because of a political risk. While analysing the relationship between political risk and FDI, which can be defined in general as the stability of the government of the host country and the foreign investment inflows to the country, Kobrin (1978) found a negative relationship between political instability and FDI. He further refined his results by defining political instability in terms of many other factors, which can eventually risk causing harm to the business operating under foreign direct investment. These factors can **include** guerrilla activities related to political movements, discriminatory taxes and the non-protection of patents.

Kobrin (1981) further elaborated his studies and observations as in the following paragraph:

"The term 'political risk' thus appears constrained from both an analytical and operation viewpoint. What we are, and should be, concerned with, is the impact of events which are political in a sense that they arise from power or authority relationships and which affect (or have the potential to affect) the firm's operations. Not the events, but their potential manifestation as a constraint upon foreign investors, should be a concern."

5: Financial Risk

Country financial default risk refers to the probability that a country will be unable to generate enough foreign exchange to enable its residents, both public and private, to meet interest and principal payments on their foreign debts. It plays a prominent role in the literature on sovereign debt and country creditworthiness and has profound implications for a country's economic and social well-being. First of all, a *de jure* or *de facto* default indicates that a country is unable to generate the foreign exchange it requires to maintain internal and external economic equilibrium. Restoration of equilibrium implies relative price changes, resource reallocation, and income redistribution, with resulting painful effects on levels of output, employment and standards of living. Besides the costs associated with economic adjustment, debt default also inflicts two other penalties on the country. The first refers to the costs associated with the loss of access to international capital markets. The second concerns the costs due to direct sanctions such as the elimination of trade credits or the seizure of assets (Clark *et al* 2004).

4.4 Political Risk

The importance of analysing these three questions is due to two major reports on the interest in FDI by developing countries instead of borrowing from developed countries. Firstly, it was mentioned in the World Bank Report (1994-95) on capital flows to developing countries in 1990-1993. Secondly, the main characteristics of FDI in sharing risk are market discipline, export orientation and the transfer of technology and managerial skills. According to recent trends in FDI flows to the developing countries, politically and economically stable countries received more FDI.

The economists arrive at different conclusions on the affect of socio-political factors on FDI, where political instability has not been defined as a major determinant of FDI flows as it varies from country to country. Aharoni (1996) found it the major determinant but Green (1972) argues that political instability has no affect on US FDI to the recipient countries, while Levis (1979) found a mixture of results while applying the two different proxies of political stability or instability to different countries.

Singh and Jun (1995) tested various models and concluded that socio-political instability is a complex phenomenon, so it gave different results[9].

Finally they concluded that the political instability is the major determinant of FDI in positive or negative affect on flows. However, the relationship between FDI and political instability can be exactly pinned down by the detailed study of the sectoral FDI data. They also concluded that the relative size of the export sector is the strongest explanatory variable of FDI flows to a host country.

Political risk analysis has become an essential part of the strategic decisions individually made by the banks lending to sovereign countries and by multinational companies investing across borders.

Despite vast literature and empirical studies on the expected risk to be faced by MNEs, the importance and significance of political risk for FDI has become one of the essential variables for empirical studies. Moreover, a definition of political risk is essential if any kind of analysis of it is to be undertaken. Thus, it is essential to recall what political risk is while analyzing the relationship between political risk and FDI.

Economists have also tried to find out the expected effects of foreign currency value on investment (returns decline in the foreign currency) in the scenario of returns on international investment as compared to the returns on domestic investments made by the MNEs. As described above, the two types of risk analysis were used for empirical analysis. Firstly, the quantitative risk analysis generally focused on a country's ability to repay the debt. Secondly, the qualitative analysis attempted to find out a country's willingness to repay the debt. During the empirical analysis of the above risks, the transfer, and short-term exchange rate risk were kept in major focus.

Simmonds and Robock (1973) define political risk in international investment situations as the discontinuities in the business environment, when they are difficult to anticipate and when they happen due to sudden change in the political situation in the host

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[9] As the regression results differ substantially when different proxies are employed to capture the relationship. The significance of a broad-based qualitative political risk index has been found to be greater for the high-FDI group.

country. Agmon (1985) defines political risk as the unanticipated changes in government policies that affect the relative prices of traded factors of production, goods and services caused by the instability in the political situation of a country.

Accordingly, there exists literature with different definitions of political risk. Indeed the definition of political risk depends on the perspective in which it is viewed by the analyst[10].

Post 1980's, the concept of political risk has gained an important impetus following the initial attempts in the economics literature to quantify and clarify the concept as a mechanism for the objective evaluation of foreign investment flows.

The evolution of FDI gave birth to a variety of economic studies using various methods and approaches to assess the political risk empirically. Among these studies, it is worth mentioning the definition by Rummel and Heenan (1978), in which they proposed a method of converting political instability into probabilistic terms to provide a scientific definition of political risk.

Various attempts have been made to provide a quantitative political risk analysis to international investors to ease their decision-making process. William Coplin and Michael O'Leary (1979) also began to develop the Political-Risk Services (PRS) Evaluation System, which has been used by a number of multinationals since the 1980's[11]. Since then, new approaches to political risk have also been developed in the economic literature. One distinguishing feature of these new approaches is their attempt to value the political risk and integrate it into the decision-making process of an enterprise, as well as their use of socio-economic and socio-political variables for the assessment of political risk[12]. The Business Environment Risk Information Index (BERI) developed by F. T. Haner (1966) as a quantitative guide to political risk ratings can be noted as the first ever services-based risk analysis system. BERI started with a review of more than 144 countries three times a year and based its judgments and

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[10] See appendix- 4.1 (page 125)

[11] http://www.icrgonline.com/page.aspx?page=icrgmethods#_top

[12] See also, "Bank of America WIS, Business Environment Risk Intelligence (BERI) S.A., Control Risks Information Services (CRIS), Economist Intelligence Unit (EIU), Euro money, Institutional Investor, Standard and Poor's Rating Group, Political Risk Services: International Country Risk Guide (ICRG), Moody's Investor Services"

appreciations on the analysis by a panel of outside experts who try to rank countries according to fifteen factors affecting the business climate (BERI 1966).

Each of the indices or ratings provided amalgamates a range of qualitative and quantitative information into a single index or rating. In the forth-coming sections, the methodologies used by some of the foremost providers of risk ratings are applied internationally in general and to Pakistan in particular (Harvey *et al* 1996).

Post 1990's, the political risk concept has been further refined due to scientific contributions from other fields of research such as political science, sociology, decision theory and psychology and the interdisciplinary work between political science and economics.

Post 1980's and 1990's, the surge in demand for FDI has become the centre of attention and the subject of discussions in the literature on international trade and finance. The determinants of FDI in general and political risk in particular have been a major question in literature on the empirical analysis of relationship in international trade and investment.

Several studies have been carried out on determinants of FDI to discover the ways and motives of international investment. Thus the empirical studies trying to determine the role of political risk in international investment decisions came up with two types: one based on executive management answers to survey questions and the second based on events data and FDI.

The empirical research into the relationship between political research and FDI is mostly related to developing countries (LDCs) due their political instability. Most of the literature and empirical findings have used basic components of political risk, such as government stability, socio-economic conditions, internal and external conflicts, corruption, ethnic violence and accountability[13].

[13] For more components see, ICRG rating system-1994 (PRS group)

The economists have found different results with positive and negative correlations between PR[14] and FDI. Some studies put more emphasis on economic variables as explanatory factors of FDI along with PR, whereas others concentrate on PR factors only. Thus, statistical empirical studies have dealt with the determinants of FDI with respect to two factors: political and economic (Singh *et al* -1995).

While reviewing the empirical literature of political risk and FDI relationships, it is useful to distinguish two approaches. The first approach, which is based only on political risk and stresses the political factors as a determinant of FDI while the second approach is based on socio-economic as well as on socio-political factors as the determinants of FDI.

Both socio-economic and socio-politically-based empirical studies on the determinants of FDI indicate that the flows of FDI are determined by the decisions of multinational enterprises according to the economic and political conditions of the host country (Root *et al* -1979).

Earlier studies by Kobrin (1976) on the relevance of political risk statistics failed to establish a relationship between political risk and the flows of FDI. Kobrin (1976) examined the relationship between the number of new manufacturing subsidiaries established in each country and several variables measuring political structure and unrest, economic-size and growth, and socio-economic development. Despite a positive correlation of the results between economic variables, Kobrin could not find any relationship between PR factors and FDI.

Nigh (1985) analyzed US FDI in manufacturing in 24 countries, including 11 developing countries, during 1954-1975. He found that for the developing countries in particular, FDI flows are related to internal conflicts such as civil war. Other empirical studies such as Yu (1987) and Brewer (1985) found statistically insignificant correlation between PR in general and governmental instability in particular and FDI.

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[14] PR: The exclusive definition of political risk (PR) includes in the sources of political risk concept all kinds of political motivated acts no matter where these are rooted.

On the other hand, many empirical studies on the economic theory of multinationals or economic theory of international production also try to account for political risk in the form of country-specific factors and to relate political factors with FDI. An overview of some studies dealing with the economic theory of MNCs and international production could therefore shed light on the relationship between political risk and FDI. These studies have found substantial and significant correlation between PR and FDI (Levis 1979).

One example of a theory of MNCs dealing with political risks is provided by the "eclectic" approach of international production as propounded by Dunning ((1973 &1993). On the basis of surveys among entrepreneurs engaged in international production, Dunning distinguishes three sets of influences on FDI, (1) market factors such as size and growth of the market measured by the GNP of the recipient country; (2) cost factors such as the availability of labour law, labour costs and inflation; (3) the investment climate as measured by the degree of foreign indebtedness and the state of the balance of payments. It is only here that political factors play a role since the investment climate is considered partly to depend on political stability.

Dunning (1981) in his eclectic model also accounts for political risk in the form of BERI (Business Environmental Risk Index) or tax burden as a determinant for FDI. In the classification of the determinants of FDI, Agarwal (1980) mentions two political factors namely political stability and the threat of nationalization in conjunction with other economic variables such as investment incentives or the degree of economic development.

Root and Ahmed (1979) also tried in their model to account for political risks and tested economic factors along with social and political factors (government change, internal armed attacks, administrative efficiency, nationalism, *per capita* foreign aid, colonial affiliation and the role of government in the economy) and found a significant influence on FDI.

The model proposed by Schneider and Frey (1985) incorporates a large number of possible determinants and looks successively at the results of the estimation of

determinants of FDI to developing countries compared with the results of estimates with three alternative models (the political, the economic and the amalgamated model). They conclude that FDI in developing countries is simultaneously determined by economic and political factors.

Some of the empirical studies have put more emphasis on macro-economic variables as explanatory factors of FDI whereas others have emphasized the importance of political risk as a major determinant of FDI. So it has become necessary to test economic factors and political risk as joint determinants of FDI due to the difficulty of making a clear-cut distinction between political and macro-economic variables.

4.5 Political Risk Measurement

Despite the difficulty of quantifying the country risks in general and political risk in particular, it is possible to collect most of the information appertaining to events available for the series in Pakistan over the period1970-2004. Most of the recent studies and a number of companies have analysed the risk by providing the risk indices on individual components of political risk to evaluate the credit rating of the country in terms of borrowing or foreign direct investments but in this research a cumulative political risk index for Pakistan has been computed for 1970-2004 for empirical analysis.

Political risk indices are, as the name implies, indices measuring the level of host country political risk, which is a part of the total country risk. A high level of an index corresponds to either a high or low level of risk, depending on the specification of the index. What is meant by political risk is determined by the way the index is constructed. The use of sub-indices is a typical way of making a political risk index. In the section, the rating system of the International Country Risk Guide (ICRG) will be presented as in Coplin and O'Leary (1994). The methodology used for the assessment of the current risk has also been taken from ICRG as a guideline[15].

The political risk assessments are made on the basis of subjective analysis of the available information and the risk assessments on a mix of subjective analysis and

[15] Source: ICRG rating system Source: Political Risk Services USA-1994

objective data. After a risk assessment (rating) has been awarded to each of the 12 risk components, labelled A to L in Table 4.1, the components within each category of risk are added together to provide a risk rating for each category. The risk ratings for each of these categories are then combined, on the basis of a formula, to provide an overall, or composite, risk rating for the country in question.

Political Risk is comprised of the following risk indicators: economic expectations vs. reality; economic planning failures; political leadership; external conflict; corruption in government; the role of the military in politics; organized religion in politics; law and order tradition; racial and nationality tensions; political terrorism; civil war; political party development; and the quality of the bureaucracy

Table-4.1

POLITICAL RISK INDEX COMPONENTS[16]

Sequence	**Components**		**Max. Points**
A	Government Stability	GS	12
B	Socioeconomic Conditions	SC	12
C	Investment Profile	IP	12
D	Internal Conflict	IC	12
E	External Conflict	EC	12
F	Corruption	Crp	6
G	Military in Politics	MiP	6
H	Religious Tensions	RT	6
I	Law and Order	LO	6
J	Ethnic Tensions	ET	6
K	Democratic Accountability	DA	6
L	Bureaucracy Quality	BQ	4
Very High Risk			00.0 to 49.9 %
High Risk			50.0 to 59.9 %
Moderate Risk			60.0 to 69.9 %
Low risk			70.0 to 79.9 %
Very Low Risk			80.0 to 100 %

The highest overall rating (100 points) indicates the lowest risk, and the lowest rating (0) indicates the highest risk. For general purposes, the overall degree of risk implied by the Composite Risk Rating calculated for any particular country can be estimated from the following broad categories:

16 Source ICRG rating system, Chapter-2, p 19-25, Political Risk Services USA-1994

00.0 to	49.5	points	Very	High	Risk
50.0 to	59.5	points	High		Risk
60.0 to	69.5	points	Moderate		Risk
70.0 to	84.5	points	Low		Risk
85.0 to	100.0	points	Very	Low	Risk[17]

4.6 Risk Assessment of Pakistan (1970-2004)

The turmoil end changes in the political structure of developing countries in general and Pakistan in particular in the 1970s and 1980s, tended to focus on the risk a private lender outside its home country can face. The analysis of country risk is used to analyse the potential shortfalls in the balance of payments, foreign exchange reserves and the economic and political condition of a host country.

Pakistan has not been able to demonstrate political stability since its foundation. During the period 1949-1999, democratically elected governments have been overthrown at different intervals by a military dictator with the help of either left wing political parties or the corrupt bureaucrats (Talbot-1998). Four army generals Ayub Khan (1959-1969), Yahya Khan (1969-1971), Zia-ul-Haq (1977-1988) and Pervaiz Musharraf (1999-2004), governed Pakistan for a total of 29 years out of 56 years of independence, but the present military leadership displays little open enthusiasm for displacing the politicians once again (Macko 1998).

During these 29 years of military dictatorship, the constitution was suspended and the country was run on temporary orders. The government instability caused by the intervention of military generals has shaken the international investors' confidence in building assets in Pakistan since 1947 in general and 1970 in particular (Noman-1985). The political unrest (1970) in the east wing of Pakistan also created an atmosphere which undermined law and order and encouraged ethnic violence and internal conflict whilst the need for property protection kept the international investors from thinking about investing in Pakistan whilst it was in such an unstable situation (Mahmood 2000). The religious and ethnic violence from 1988-2004 kept most of the international investors away from Pakistan. Despite a stable, so-called democratic government under

[17] For further details see "ICRG PR indexation Methodology", Chapter-02

the power of a military general (1999-2005), Pakistan has still not been able to capture as big a share of FDI as other developing countries as shown on Tables 2.1 (page 31).

Pakistan's economy at present is recovering after passing through a critical phase in its history, the 1999 military intervention and 2001 terrorist activities in the USA on 11th September 2001. GDP growth rate reached 8.4% for 2004-05 after dipping to 2.6% in 2000-2001 as shown in Table 8.1. Also FDI remained at its lowest level during 2000-01 at US$332 million during 1999-2005 as shown in Table 8.1. Frequent interruptions in the implementation of structural reforms and stabilization measures in the past have caused a deceleration in economic activity on one hand and serious macroeconomic imbalances on the other. Against an average growth of slightly above 6.0 percent in the 1980s, economic growth slowed to an average of 5.1 percent in the 1990s. More importantly, real GDP growth decelerated to an average of 3.1 percent during 1996-99.

Despite the low and declining economic growth, GDP grew by 4.8 percent in 1999-2000, which was supported by an impressive recovery in agriculture, which grew by 7.1% as against 1.9 percent in the preceding year. The large-scale manufacturing growth declined by 0.7 percent in 1999-2000 due to low levels of foreign investment of between 2.2 and 3.7% of total FDI in manufacturing, especially in textile, cement and sugar.

Real GDP grew by 8.4 percent in 2004-05 as against 6.4% during 2003-04 and surpassed the target (6.6%) for the year by a wide margin. The sharp pick up in growth during 2004-05 is ably supported by a stellar performance in large-scale manufacturing, impressive recovery in agriculture and a strong growth in the services sector. Large-scale manufacturing grew by 8.6% against the target of 12.2% and last year's (2003-04) achievement of 18.2%. Growth in large-scale manufacturing has been broad-based as many sub-sectors registered a high double-digit growth and targeted 14.5% to achieve during 2004-05 (Economic Survey of Pakistan 2005-06).

As stated earlier, growth has been underpinned by supportive macroeconomic policies and benign financial market conditions. Like growth, foreign direct investment was broad-based. Major growth in investment by the foreign sector was witnessed in

agriculture (10.2%), manufacturing (8%), mining and quarrying (12%), construction (2.8%), transport and communication (35%) and finance business (18%). As a result of the sharp rise in foreign investment, general FDI was up by 45% in 2004-05 due to leading investment by the UAE, 24% of total FDI, in the communications sector.

Despite an overwhelming GDP growth rate, Pakistan's total stock of external debt and foreign exchange liabilities grew at an average rate of 6.2 percent per annum during 1990-99 – rising from $21.9 billion in 1990 to $37.6 billion by the end of June 1999 and further to $37.9 billion by 1999-2000 but thereafter it exhibited a declining trend from $37.86 billion in 1999-00 to $36.62 billion by the end of March 2005.[18]

Pakistan's external debt and liabilities had reached unsustainable levels by the end of the 1990-2005, posing a serious danger to the economic future and credit worthiness of the country. The empirical evidence suggests bidirectional causality between external debt and growth. Higher external debt lowers the growth rate whilst at the same time lower growth increases indebtedness (Fosu 1996).

The geographical position of Pakistan is very important as it stands in between the vast hot Indian Ocean connected to the Gulf Sea and the approach to East Asian countries, especially to China. Its eastern border is entirely shared with its foundation rival, India. The relations with India are always in a very critical situation as they have fought two wars and now both of the countries possess nuclear weapons and have a claim for Kashmir, which is the basic cause of tension and conflict in the relations between the countries. Pakistan's relations with China are very friendly as China constructed a huge road crossing the Himalayas Mountains called Shahra-e-Raishem[19].

The strategic importance of Pakistan is recognised but the religious militancy is a threatening image for the international investor, particularly from developed countries like the EU and the US. This has not affected much of the FDI from the US and the UK but the other regional countries have been affected more[20].

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[18] See http://www.finance.gov.pk/survey/chapters/10-exter_d.PDF, table-10.1, pp-7

The geographical location of the host country has a causal relationship with FDI due to the increasing use of outsourcing. It has also been empirically shown that a safer location effect conveyed by the host country is a key explanation for a change in investors' sensitivity to the determinants of foreign direct investment (Waldkirch-2003).

4.7 A Political Risk Index for Pakistan

The index is calculated according to the formula mentioned above as taken from ICRG methodology. The International Country Risk Guide (ICRG) rating comprises three categories of risk: political, financial and economic, with political risk containing 12 main components. A separate index is created for each of the sub-categories. The Political Risk index is based on 100 points and different weightings have been given to each subcategory in political risk. The composite scores, ranging from zero to 100, are then broken into categories from Very Low Risk (80 to 100 points) to Very High Risk (zero to 49.5 points) table-4.1 (page 76).

In general terms, if the points awarded are less than 50% of the total, that component can be considered as very high risk. If the points are in the 50-60% range the component is high risk, in the 60%-70% range represents a moderate risk, in the 70-80% range a low risk and in the 80-100% range a very low risk. This being a general guideline does not mean that the risk will be graded according to one component but one low risk component can compensate for a higher risk rating in another.

Similarly a better financial or economic risk rating can compensate for a poor political risk rating. As only the political risk indices (PRI) will be used for the empirical analysis of FDI inflows to Pakistan (1970-2005), the risk calculated will be this dissertation's core and original work. The following section will have a detailed individual introduction of the 12 main components of PRI with a brief introduction to the sub-components.

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[19] http://www.hsbc.com.hk/pdf/corp/pk.pdf
[20] See Appendix-4.3 for PR indexation references on killing of French and Chinese engineers May-2002)

4.8 Aggregate Political Risk

The aggregate risk model system is based on a set of 22 different political, financial, and economic components, with political risk comprising 12 of the basic components and financial and economic risk comprising 5 each (ICRG-94).

In this research, political risk is an important factor driving FDI so a political risk index has been prepared using qualitative information for Pakistan for the period 1970-2004. According to the PRS group methodology of calculating individual political risk index, the political risk index has been assigned with 12 basic components, the aggregate political risk has been given an overall risk-weighting of 100 with a risk index of 0 to 100, 0 meaning the highest risk and 100 the lowest.

Of the 12 basic components, 5 have been assigned a risk weighting of 12; 6 have a weighting of 6; and a risk weighting of 4 has been assigned to the last remaining basic component. The basic 12 components have been divided into a different number of sub components. The risk weighting of all basic components has been distributed equally each of their subcomponents, as shown on Table-4.1 (page 76).

The first 5 basic components carrying a weighting of 12 each have been considered as 1 full contributing component in the total of 100 points. The next 6 basic components carrying a weighting of 6 each have been considered as 50% of any one of the first 5 basic components, which means that 2 second-type basic components carry equal weighting with one of the first type of basic component. The 12^{th} and last basic component carrying a weighting of 4 has been considered as 33.33% of any one first-type subcomponent. The following basic formula is proposed for the calculation of the aggregate political risk; where the variables are defined on Table-4.1 (page 76):

$$PRI = \left[(GS + SC + IP + IC + EC + Crp + MiP + RT + LO + ET + DA + BQ)/8.333\right]$$

where weightings are expressed as:

$GS + SC + IP + IC + EC$	$(5 \times 12)/12$	$= 5$
$Crp + MiP + RT + LO + ET + DA$	$(6 \times 6)/12$	$= 3$
BQ	$(1 \times 4)/12$	$= 1/3$
		8.333

For example the aggregate risk for 1973 will be calculated as follows[21]:

$$PRI = [83.33 + 62.50 + 33.33 + 37.50 + 33.33 + 66.67 + 83.33 + 75.00 + 58.33 + 29.17 + 50.00 + 43.75]/8.333 = 78.75$$

A very low risk during 1973 due to a new democratic government with a majority in the parliament of Pakistan made it easy for the government to implement its policies during its period in office from 1973 to 1977. The risk profile even remained above an average of 50% throughout 1978-2004 due to better economic and social policies along with new protective rules and regulations to facilitate and attract foreign investors to the country, despite its fragile economic and political environment[22].

The institutional strength and quality of the political stability is another shock absorber that tends to minimize revisions of policy when governments change[23]. Therefore, high points are given to countries where the political instability risk has been low. Countries that lack the cushioning effect of a strong political stability receive low points because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions (ICRG-94).

Correlations of - 4% and -30% have been found between government stability and real FDI flows and stock respectively for 1970-2004, which indicates that the political risk (PR) of the country domestically does not have much of an effect on the flows but affects the stock of FDI. The correlations of -11% and -5% between nominal FDI flow and stock and PR respectively has been found, which reveals that the political risk index does show a change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and political risk (PR). This indicates that the political risk level does affect the risk-averse international investors' confidence as it reveals a negative correlation. The correlation results with a two-year lag between FDI flows and stock also do not reveal any significant change at -7% and -11%, as shown in Tables 4.3 to 4.6 on pages 119-120. The two-year lag correlation results also reveal a negative correlation between FDI flows, stock and Political Risk, where the correlation is -11%.

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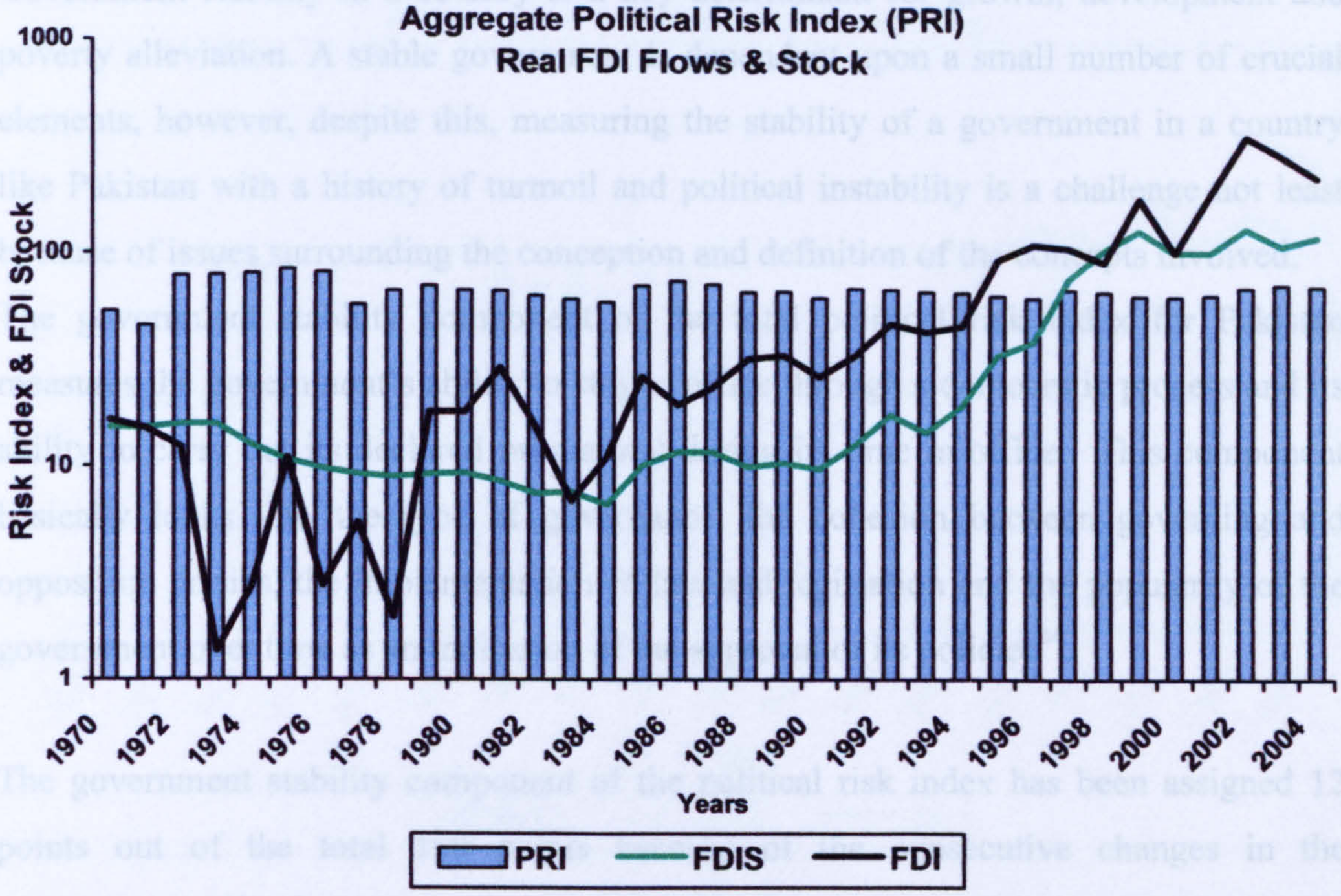
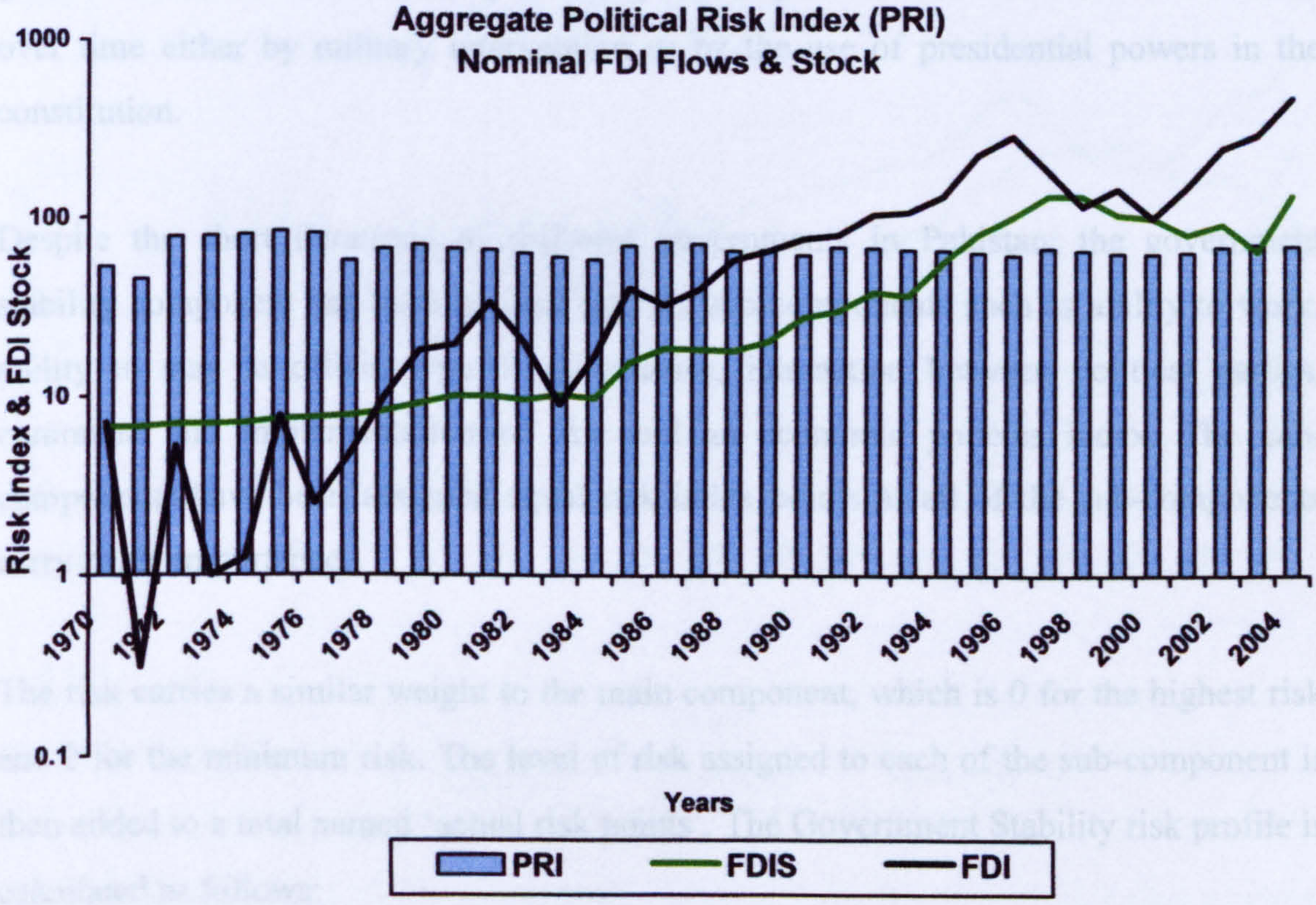
[21] See Table-4.2, page 117
[22] See Appendix-4.2, section-C (1970-2005)
[23] See Appendix-4.2 & 4.3

Chart -4.1 (a & b)


Aggregate Political Risk Index (PRI)
Real FDI Flows & Stock
1000
100
10
1
Risk Index & FDI Stock
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
PRI
FDIS
FDI


Aggregate Political Risk Index (PRI)
Nominal FDI Flows & Stock
1000
100
10
1
0.1
Risk Index & FDI Stock
1970
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
PRI
FDIS
FDI

1: Government Stability

Government stability in a country is a key determinant for growth, development and poverty alleviation. A stable government is dependent upon a small number of crucial elements, however, despite this, measuring the stability of a government in a country like Pakistan with a history of turmoil and political instability is a challenge not least because of issues surrounding the conception and definition of the concepts involved.

The government stability component of the total political risk index for Pakistan measures the government's ability to stay in office through a democratic process and its ability to carry out its declared program(s) during its time in office. This component basically looks into the type of governance, the cohesion between governing and opposition parties, the implementation of law and legislation and the popularity of the government over time as an indication of the approval of its policies[24].

The government stability component of the political risk index has been assigned 12 points out of the total 100 points because of the consecutive changes in the governments. The democratically elected political governments have been destabilized over time either by military intervention or by the use of presidential powers in the constitution.

Despite the short durations of different governments in Pakistan, the government stability component has been divided into six sub-components such as ability to work, ability to stay in office, type of governance, interaction between political parties, command and implementation of law and an economic policies index. The sub-components have been assigned equal risk index points as all of the sub-components carry equal importance.

The risk carries a similar weight to the main component, which is 0 for the highest risk and 2 for the minimum risk. The level of risk assigned to each of the sub-component is then added to a total named 'actual risk points'. The Government Stability risk profile is calculated as follows:

Government Risk Profile of 2 ARP[25]=2; TRP[26]=12; (2/12)*100=16.67=very high risk[27].

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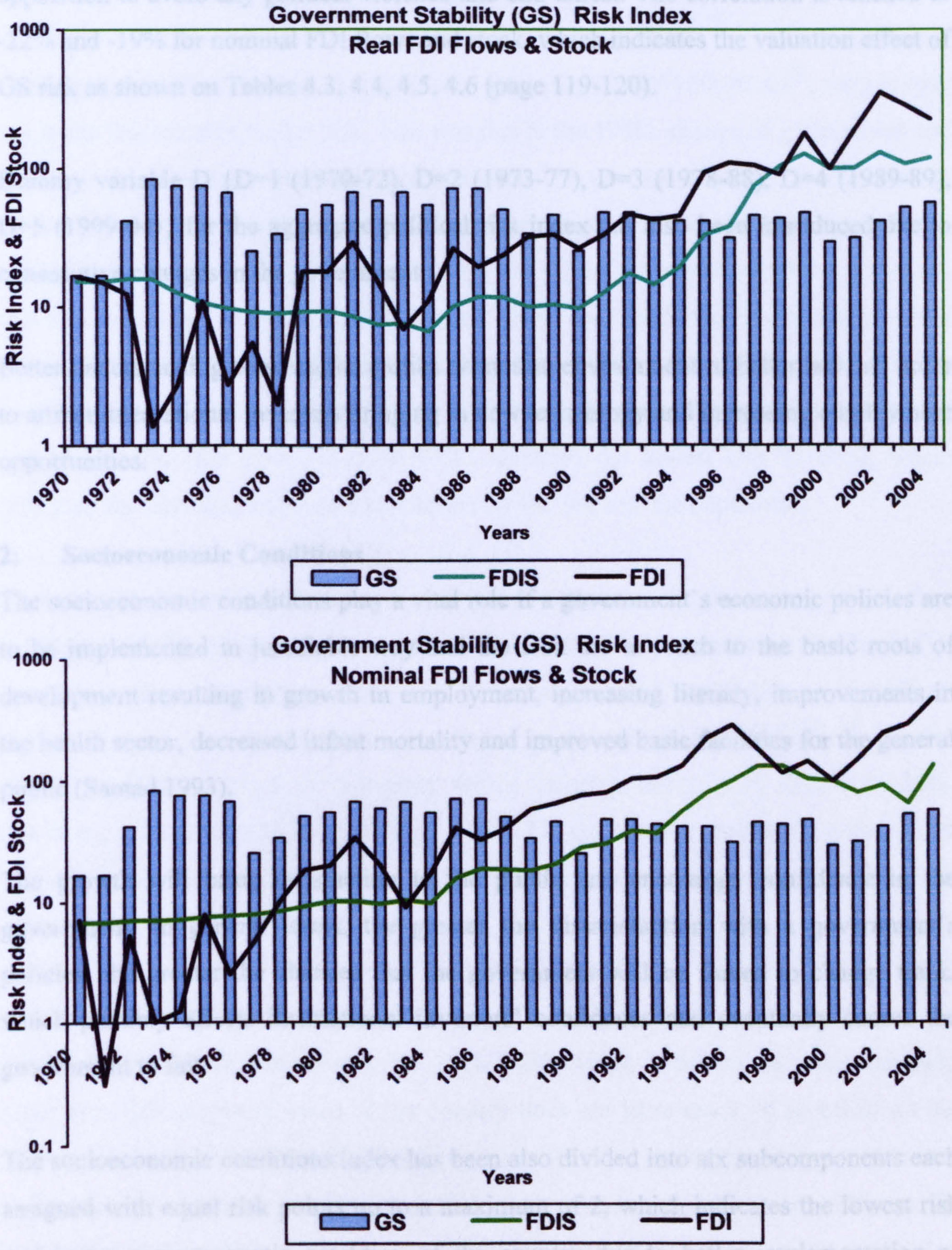
[24] See Appendix-4.3 (A & B), section-A (1970-2005)
[25] Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
[26] Total risk points (Total weight age points given to each component in ICRG methodology)
[27] Source: ICRG rating system Source: Political Risk Services USA-1994

Chart -4.2 (a & b)



A negative correlation of 14% and 18% has been found between government stability and FDI flows and stock respectively for 1970-2004, which indicates a negative influence for the government's inability to stay in office and inability to work for the best implementation of law and legislation along with its economic policies. This also

indicates that there has been no collusion between the governing party and the opposition to avoid any political violence and end unrest. The correlation is reached to -22% and -19% for nominal FDI flows and stock, which indicates the valuation effect of GS risk as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

Dummy variable D {D=1 (1970-72), D=2 (1973-77), D=3 (1978-88), D=4 (1989-89), D=5 (1999-04)} for the aggregate political risk index has also been introduced due to consecutive changes in the government.

Better understanding between the parties creates an environment of better law and order to attract international investors bringing in new technology and increasing employment opportunities.

2: Socioeconomic Conditions

The socioeconomic conditions play a vital role if a government's economic policies are to be implemented in justifiable way and the fruit are to reach to the basic roots of development resulting in growth in employment, increasing literacy, improvements in the health sector, decreased infant mortality and improved basic facilities for the general public (Samad 1993).

The growth will bring satisfaction to the public and encourage confidence in the government. In general terms, the greater the dissatisfaction with a government's policies, the greater the chances that the government will be forced to change track, which possibly affects international investors' confidence and eventually causes the government to fail.

The socioeconomic conditions index has been also divided into six subcomponents each assigned with equal risk points up to a maximum of 2, which indicates the lowest risk and better socioeconomic condition of the country due to better implementation of social and economic policies. This section comprises public reaction to policies, public facilities, employment, interest rate, housing market and, most importantly, the infant mortality rate. The infant mortality rate was recorded at 117 per 1000 in the 1970s. This fell to 90 per 1000 infants during 1990s and further went down to 74 per 1000 during

2000-2004. Similarly the risk points have been assigned according to the changing conditions of other sub-components during 1970-2004.

Socioeconomic Risk Profile of 5 ARP=5; TRP=12; (5/12)*100=41.66[28], very nearly moderate risk towards higher risk. This was due to the 1970s change of government and civil war threat in the eastern wing of Pakistan. The upsurge of public reaction in the Eastern wing was due to the unjustified implementation of social and economic policies mainly in the eastern wing of Pakistan during the 1958-1969 period of military rule. But this risk went down as the new political government took over after the separation of the eastern wing (now Bangladesh) and gave more benefits to employees and spent more on social indicators like health, education and living standards by building houses for employees. The risk index reached 83.33 showing the lowest risk in 1976, which indicated the best socioeconomic conditions for the mass of the population.

This attempt aims to identify those factors that are important for the society in question, i.e. those with the greatest political impact, and assess the component on that basis. For example a three percentage point rise in unemployment could have a significant political impact in a country that has enjoyed an unemployment rate of just 2%, but would be barely noticed in a society where unemployment is in excess of 30%. Similarly, a sharp rise in interest rates, which hit the housing market in a developed society, would have a negligible impact in a society where most people secure their everyday needs by barter[29].

A negative correlation of -14% has been found between socioeconomic conditions and FDI flows and stock respectively for 1970-2004, which indicates the socioeconomic conditions of the general mass of the country does not have much of an effect on the flows and stock of FDI, but it can still be considered as an important factor due to a correlation of -14%. A movement in FDI stock was found during the 1980s as the socioeconomic conditions improved to 67 index points, revealing lower risk and higher FDI flows and stock as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

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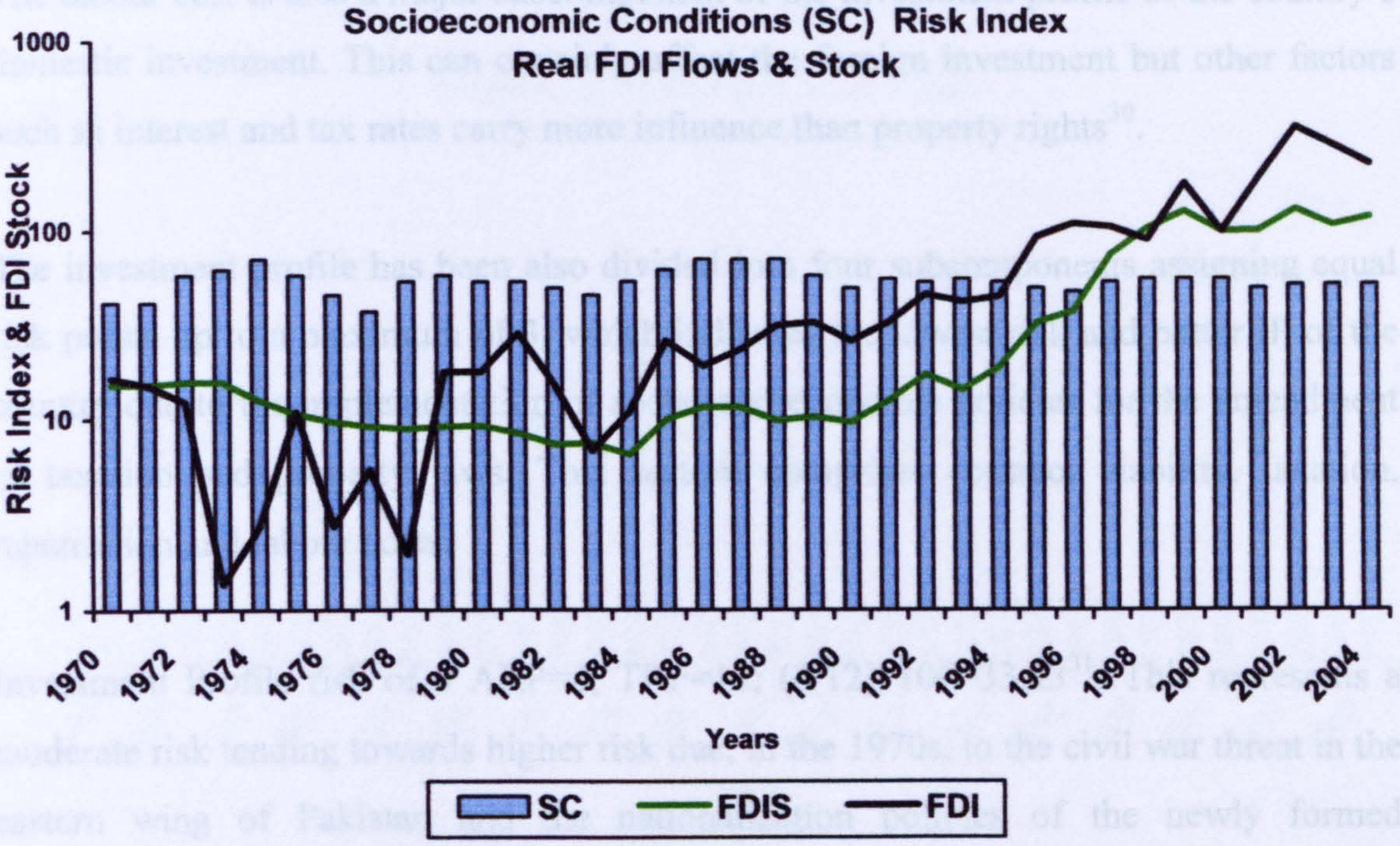
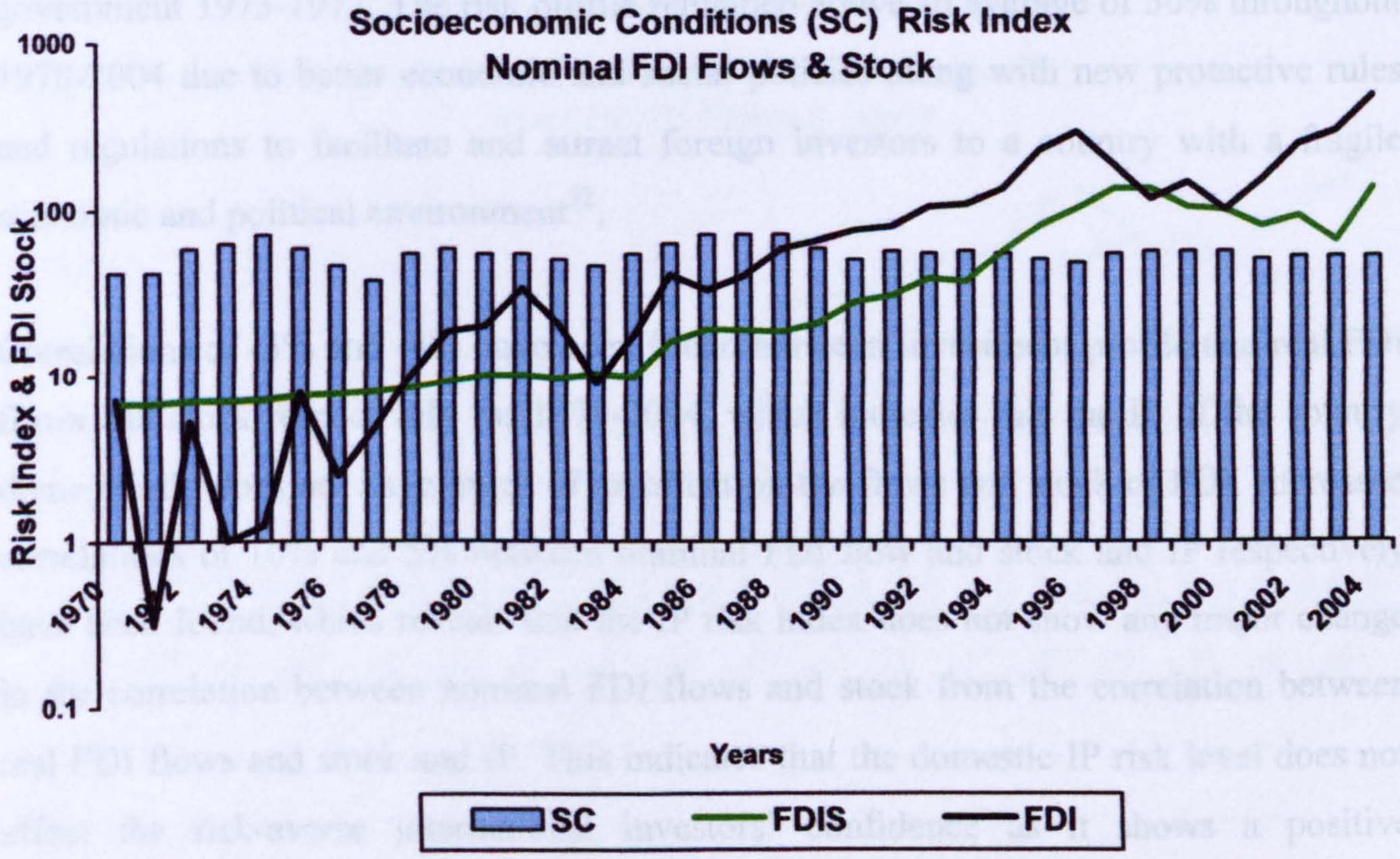
[28] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

[29] See Appendix-4.2 & 4.3 : section-B (1970-2005)

Chart -4.3 (a &b)





3: Investment Profile

The rating for the stability of government gives the impression that a stable government can implement its economic and social policies in a better way, which will yield it benefits with the passage of time. This can be achieved by reducing the risk to property rights and/or taxation.

The labour cost is also a major subcomponent of the investment profile of the country's domestic investment. This can certainly affect the foreign investment but other factors such as interest and tax rates carry more influence than property rights[30].

The investment profile has been also divided into four subcomponents assigning equal risk points up to a maximum of 3, which indicates the lowest risk and better IP of the country due to the implementation of social and economic policies for the amendment of taxation and property laws. This section comprises contract viability, taxation, repatriation and labour costs.

Investment Profile risk of 4 ARP=4; TRP=12; (4/12)*100=33.33[31]. This represents a moderate risk tending towards higher risk due, in the 1970s, to the civil war threat in the eastern wing of Pakistan and the nationalization policies of the newly formed government 1973-1977. The risk profile remained above an average of 50% throughout 1978-2004 due to better economic and social policies along with new protective rules and regulations to facilitate and attract foreign investors to a country with a fragile economic and political environment[32].

Correlations of -3% and -4% have been found between investment profile and real FDI flows and stock respectively for 1970-2004, which indicates that the IP of the country domestically does not have much of an effect on the flows and stock of FDI. Increased correlations of 10% and 5% between nominal FDI flow and stock and IP respectively have been found, which reveals that the IP risk index does not show any major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and IP. This indicates that the domestic IP risk level does not affect the risk-averse international investors' confidence as it shows a positive correlation. The correlation results for 02 years lag at 8% and 5% between FDI flows and stock also does not reveal any significant change Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).[33]

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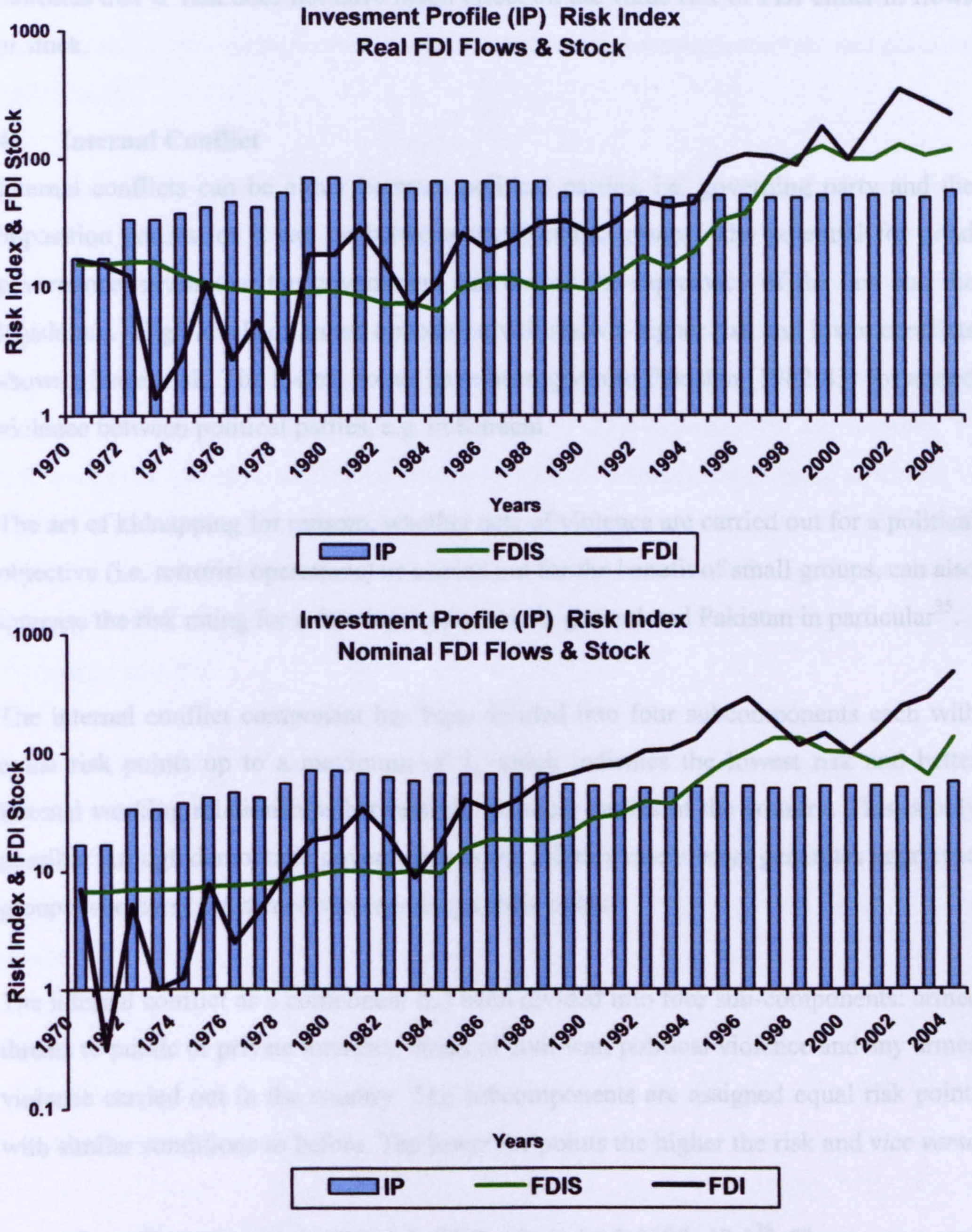
[30] See Appendix-4.2 & 4.3 , section-C (1970-2005)
[31] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994
[32] See Appendix-4.2 & 4.3, section-C (1970-2005)
[33] See tables 4.3, 4.4, 4.5, 4.6 (pages 119-120)

Chart -4.4 (a & b)



In this attempt to identify those factors that are important for the international investors, such as protection of their capital and profits, despite higher labour costs, the investment profile showed a higher correlation of 50% with real FDI flows and stock. This reveals

the improved implementation of the 1976 investment act[34]. Meanwhile, an average correlation of 64% has been found between IP and nominal FDI flows and stock, which indicates that IP risk does not have much effect on the value risk of FDI either in flows or stock.

4: Internal Conflict

Internal conflicts can be either between political parties, i.e. governing party and the opposition parties, or it can be between small ethnic groups. The potential for good governance means that the government can ensure the supremacy of the law and the legislature. High levels of armed opposition will show a higher risk and lower conflicts shows a lower risk. The lowest points have been given to Pakistan (1982-83) for armed violence between political parties, e.g. in Karachi.

The act of kidnapping for ransom, whether acts of violence are carried out for a political objective (i.e. terrorist operations) or carried out for the benefit of small groups, can also increase the risk rating for a developing country in general and Pakistan in particular[35].

The internal conflict component has been divided into four subcomponents each with equal risk points up to a maximum of 3, which indicates the lowest risk and better internal working relationships between the political parties of the country. This is only possible through democratic government as the military rule always generates aggrieved groups who carry out armed violence to get their rights.

The internal conflict as a component has been divided into four sub-components: armed threats to public or private interests, threat of civil war, political violence and any armed violence carried out in the country. The subcomponents are assigned equal risk points with similar conditions as before. The lower the points the higher the risk and *vice versa*

Internal conflict risk of 1.5 ARP=1.5; TRP=12; (1.5/12)*100=12.5[36]. There was a very high risk during 1971 due to a civil war threat in the eastern wing of Pakistan. The internal conflict in the eastern wing of Pakistan during 1970 was due to long-term

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[34] See Appendix-4.2 & 4.3, section-C (1970-2005)
[35] See Appendix-4.2 & 4.3 , section-D (1970-2005)
[36] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)

military rule by the dictator belonging to the western part of the country[37]. The risk profile remained above an average of 21-50% throughout 1978-2004 despite better economic and social policies along with new protective rules and regulations to facilitate and attract foreign investors to a country with a fragile economic and political environment[38].

A correlation of 17% and 19% has been found between IC and real FDI flows and stock respectively for 1970-2004, which indicates that the IP of the country domestically has little effect on the flows and stock of FDI. The correlations of 11% between nominal FDI flow and stock and IC respectively, reveal that IC risk index does not show any major difference in the correlation between nominal FDI flows and stock and the correlation between real FDI flows and stock and IC. This indicates that the domestic IC risk level does not affect the risk-averse international investors' confidence as it reveals a positive correlation. The correlation results for the lag of two years between FDI flows and stock, which is 17% and 16%, also fails to reveal any significant change, hence there is no affect on the value of FDI due to the IC risk as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

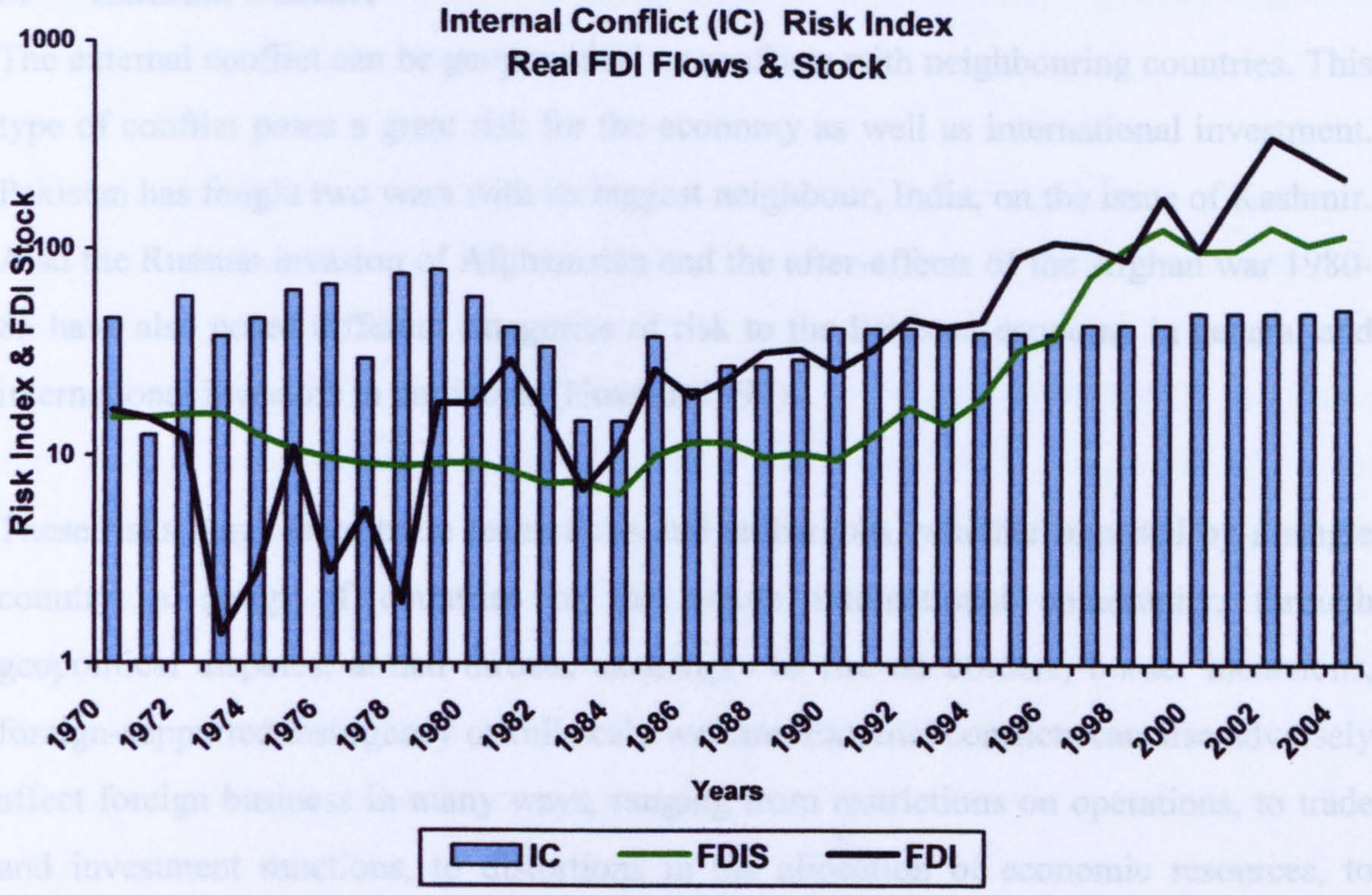
The overall FDI flows and stock were not affected by the IC risk, except during 1983-84 when the IC risk index rose to a higher risk level of 15%. FDI flows and stock fell considerably due to civil disorder in Karachi posing a threat to foreign investments and properties. The whole country's IC risk level remained in the high-risk region for the period 1978-2004.

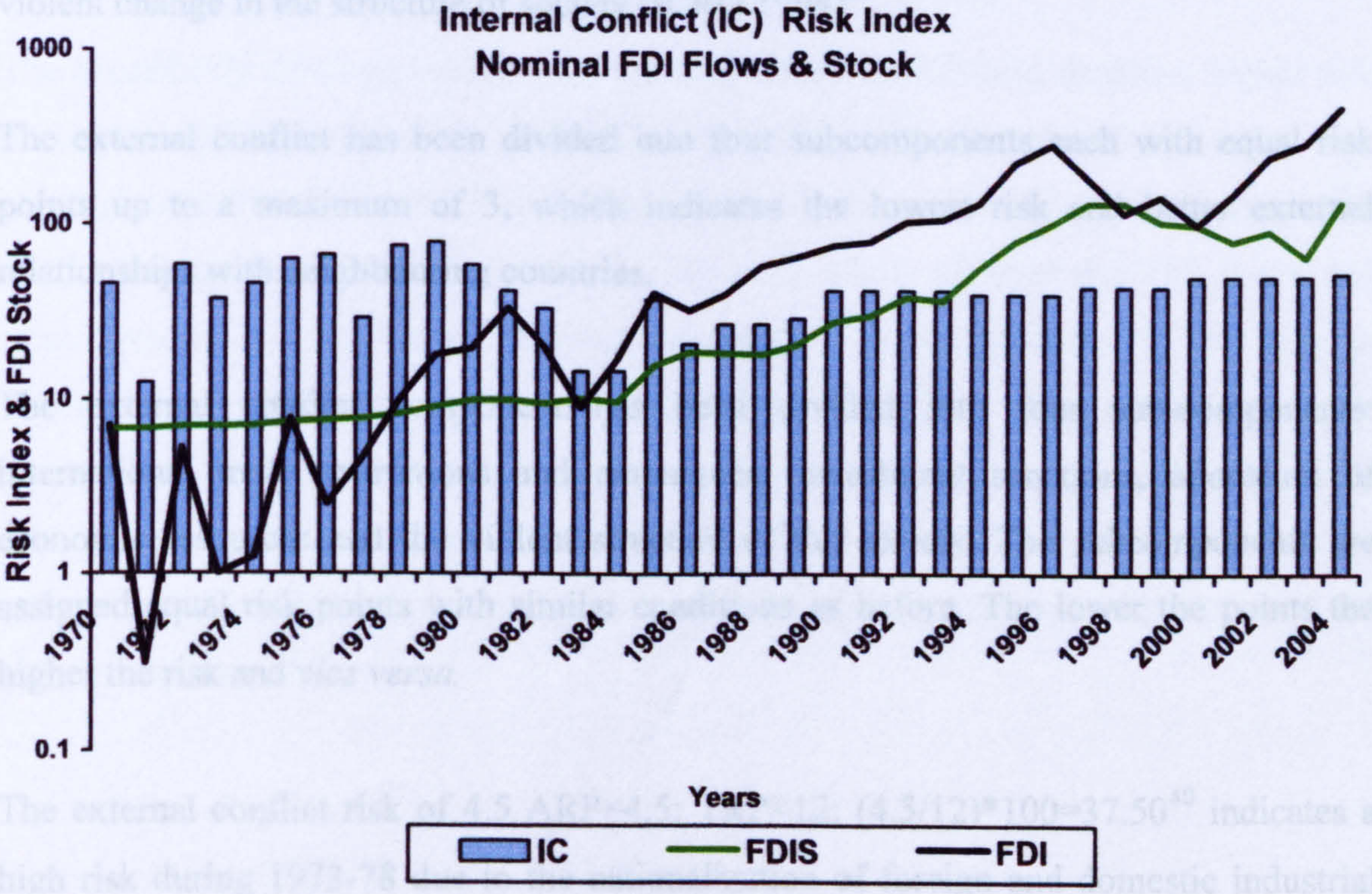
Source: ICRG rating system Source: Political Risk Services USA-1994

[37] See Appendix-4.2, section-D (1970-2005)

[38] See Appendix-4.2, section-D (1970-2005)

Chart -4.5 (a & b)


Internal Conflict (IC) Risk Index
Real FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
IC
FDIS
FDI


Internal Conflict (IC) Risk Index
Nominal FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
0.1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
IC
FDIS
FDI

5: External Conflict

The external conflict can be geographical or conflicts with neighbouring countries. This type of conflict poses a great risk for the economy as well as international investment. Pakistan has fought two wars with its biggest neighbour, India, on the issue of Kashmir. Also the Russian invasion of Afghanistan and the after-effects of the Afghan war 1980-85 have also posed different categories of risk to the Pakistan economy in general and international investors in particular (Hussain 1997).

These risks range from trade restrictions and embargoes, whether imposed by a single country, a group of countries or the whole international community, through geopolitical disputes, armed threats, exchanges of fire on borders, border incursions, foreign-supported insurgency or full-scale warfare. External conflicts can also adversely affect foreign business in many ways, ranging from restrictions on operations, to trade and investment sanctions, to distortions in the allocation of economic resources, to violent change in the structure of society (ICRG 1994)[39].

The external conflict has been divided into four subcomponents each with equal risk points up to a maximum of 3, which indicates the lowest risk and better external relationships with neighbouring countries.

The external conflict component has been divided into four sub-components: international trade restrictions and embargoes, investment sanctions, allocation of economic resources and the violent structure of the society. The subcomponents are assigned equal risk points with similar conditions as before. The lower the points the higher the risk and *vice versa.*

The external conflict risk of 4.5 ARP=4.5; TRP=12; (4.5/12)*100=37.50[40] indicates a high risk during 1973-78 due to the nationalization of foreign and domestic industrial units by the government of Pakistan, which created a conflict with the western allies affecting trade relations. The military rule (1978-1988) also became another reason for

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[39] See Appendix-4.2 & 4.3 , section-E (1970-2005)

[40] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

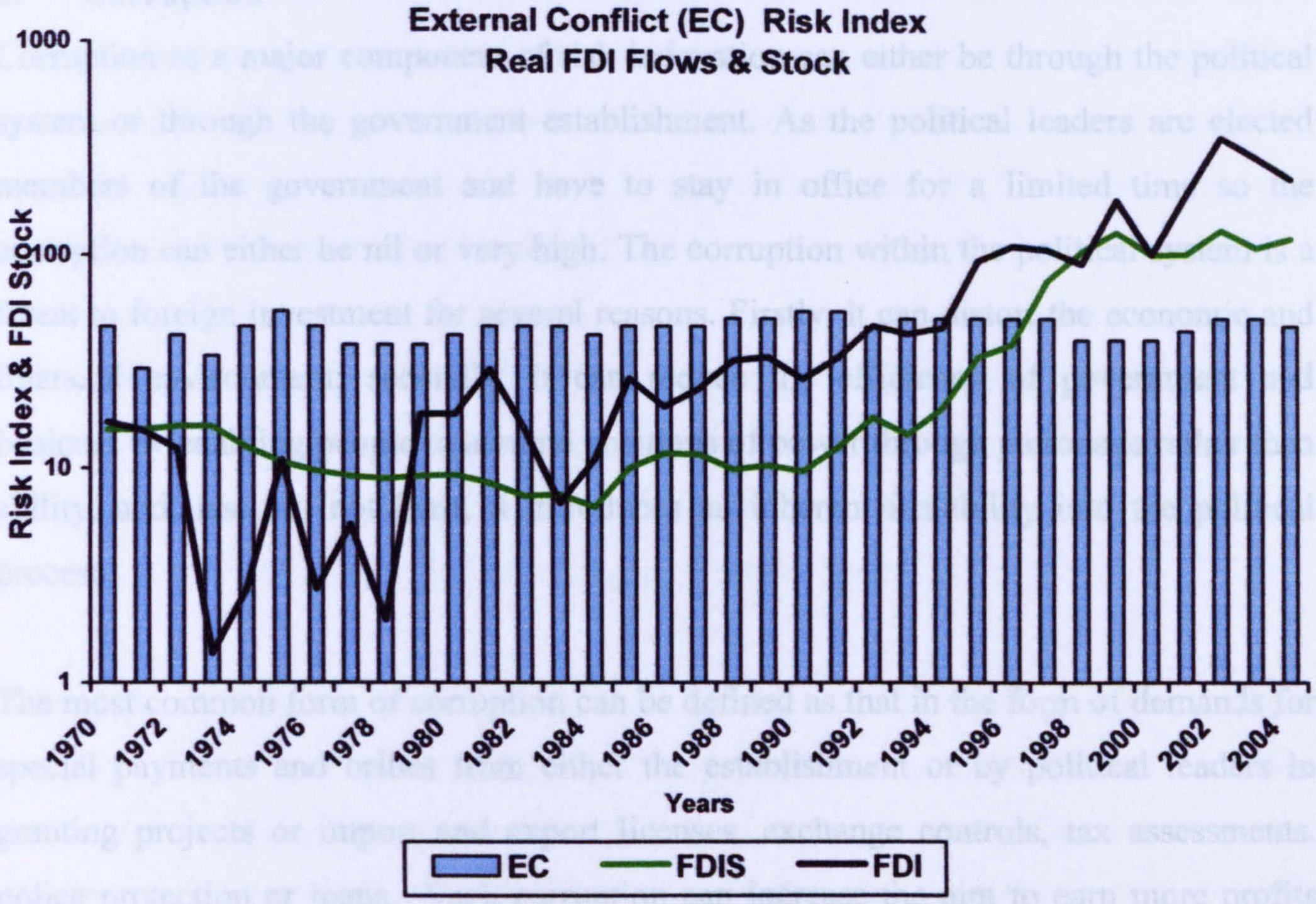
the trade restrictions, which could not gain the international investors' confidence despite a change in the policy of nationalization. The prolonged military rule also generated violence in Pakistani society[41].

A correlation of 20% & -0.01% between EC and real FDI flows and stock respectively for 1970-2004 indicates that EC has a higher correlation with FDI flows than with FDI stock where there is little if any correlation. Increased correlations of 34% and 15% between nominal FDI flow and stock and EC respectively, reveal that the EC risk index for Pakistan has a valuation effect on the flows and stock of FDI as most of FDI comes from the western allies of Pakistan. This indicates that the EC risk level does affect the risk-averse international investors' confidence as it reveals a positive correlation. The correlation results for the two years lag between FDI flows and stock also reveal significant changes of 10% and 10%, indicating that the EC risk can affect the FDI flow or stock after a lag of at least two years as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

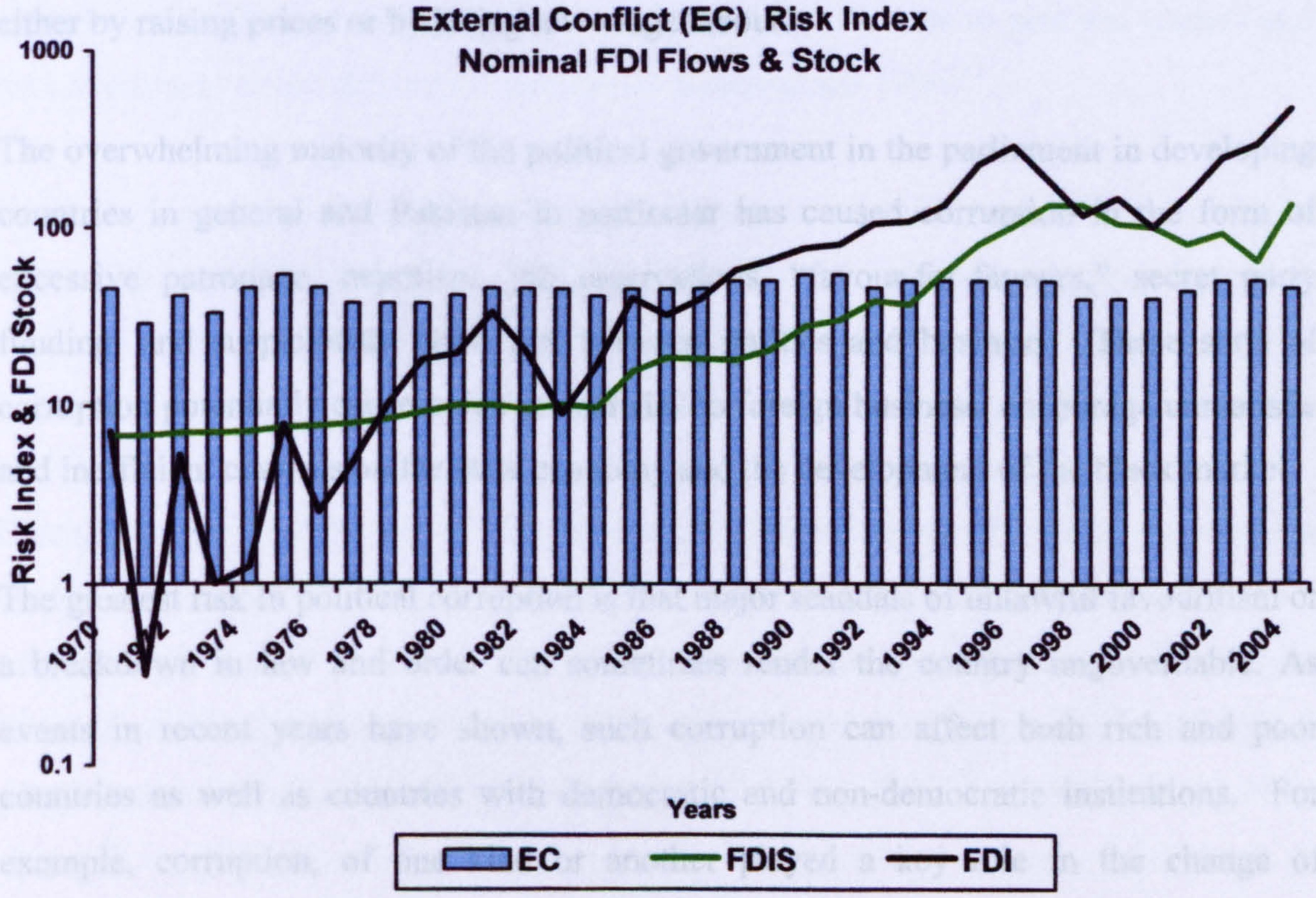
The overall FDI flows and stock were not affected by the EC risk, despite a higher risk during the military regimes for 1978-1988 and 1999-2001 when the IC risk index rose to a higher-level risk of 40%. Pakistan carried out its first atomic bomb test during 1998 and international trade restrictions were imposed, which affected the FDI flows and stock considerably but the international investors remained interested in investing in Pakistan due to denationalization and privatization of the most attractive industrial and financial units (Chart-4.5 a & b). The dummy variables used for the consecutive changes in the government can be used as the conflict dummies as the change in the governments gave rise to external and internal conflicts, which in return affected the international investors.

[41] See Appendix-4.2 & 4.3, section-E (1970-2005)

Chart -4.6 (a & b)



External Conflict (EC) Risk Index



6: Corruption

Corruption as a major component of risk indexation can either be through the political system or through the government establishment. As the political leaders are elected members of the government and have to stay in office for a limited time so the corruption can either be nil or very high. The corruption within the political system is a threat to foreign investment for several reasons. Firstly, it can distort the economic and financial environment; secondly, it can reduce the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability, and, last but not least, it introduces an inherent instability into the political process.

The most common form of corruption can be defined as that in the form of demands for special payments and bribes from either the establishment or by political leaders in granting projects or import and export licenses, exchange controls, tax assessments, police protection or loans. Such corruption can increase the aim to earn more profits either by raising prices or by hiring low-wage labour.

The overwhelming majority of the political government in the parliament in developing countries in general and Pakistan in particular has caused corruption in the form of excessive patronage, nepotism, job reservations, "favour-for-favours," secret party funding, and suspiciously close ties between politics and business. These sorts of corruption potentially cause much greater risk to foreign business; encourage unrealistic and inefficient controls on the state economy and the development of the black market.

The greatest risk in political corruption is that major scandals of unlawful favouritism or a breakdown in law and order can sometimes render the country ungovernable. As events in recent years have shown, such corruption can affect both rich and poor countries as well as countries with democratic and non-democratic institutions. For example, corruption, of one kind or another played a key role in the change of government, the reorganization of the political system and the collapse of governmental authority and law and order in Pakistan (NAB-2002)[42].

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[42] National Accountability Bureau (NAB)-2002, " Report by NAB on defaulters before 2002 election"

One of the difficulties in assessing the degree to which political corruption represents a potential risk is that much of it is hidden from general view until it suddenly erupts in a major scandal. However, one possible early indicator of potential corruption is the length of time a government has been in power continuously. The most important feature is that Pakistan has had the same party or parties in government for decades.

In assessing the corruption risk, therefore, we look first at how long a government has been in power continuously. In the case of a one-party state or non-elected government, corruption, in the form of patronage and nepotism, is an essential prerequisite and it is therefore corrupt, to a greater or lesser degree, from its inception.

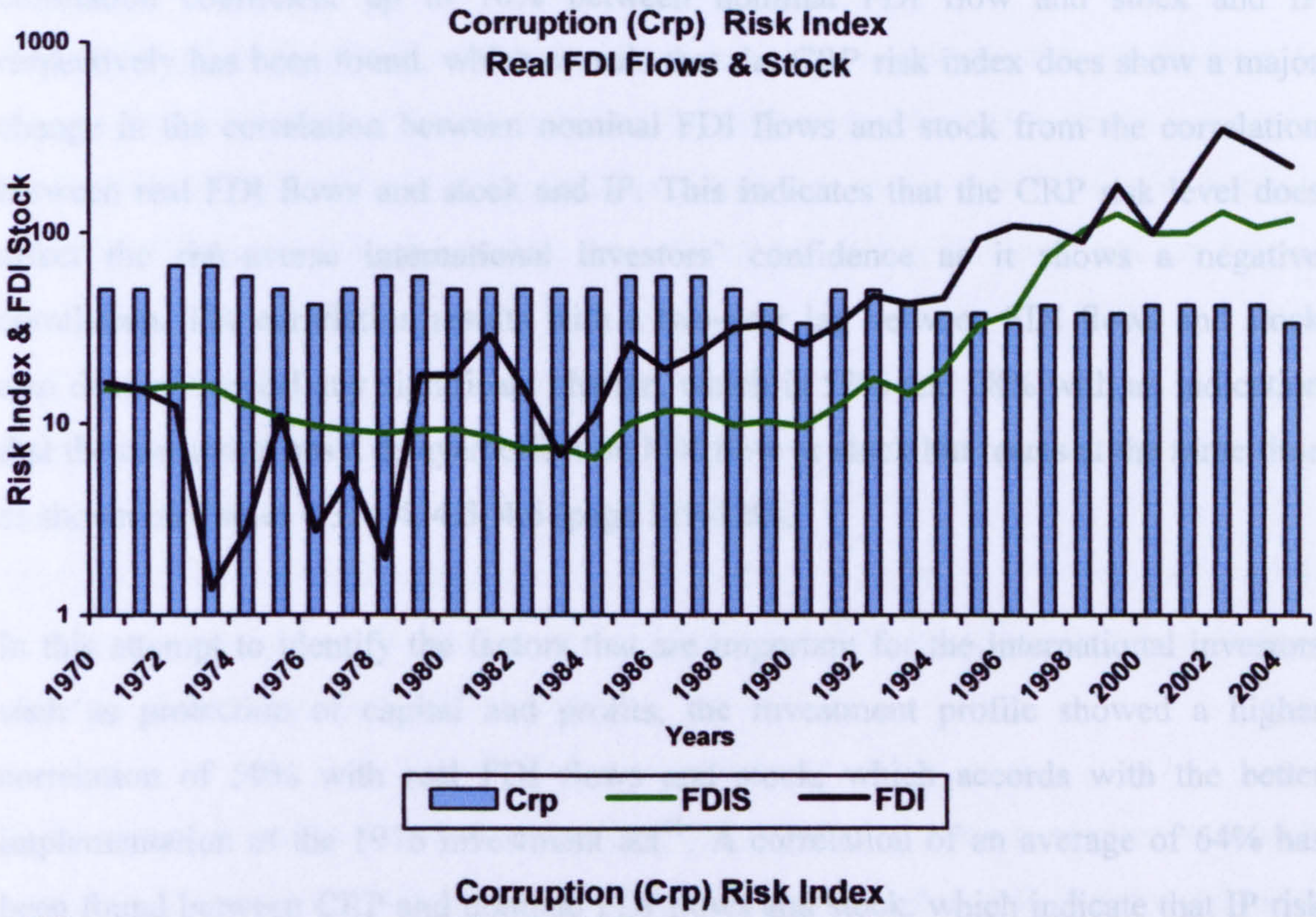
In the case of a democratic government, it has been our experience, almost without exception, that things begin to go wrong after an elected government has been in office for more than two consecutive terms, that is, eight to ten years. On that basis, the highest risk ratings as reported by Transparency International (1996), Pakistan was graded as the 2nd most corrupt nation in the world in reference to political leaders and the government establishment (Transparency International 1996)[43].

Corruption is allocated a single subcomponent, the length of the government's stay in office, which indicates that the higher or lower risk of corruption is only dependent upon the government's period in office. If the governing party is efficient enough to implement its party constitution then the risk index can be lower, otherwise it is higher.

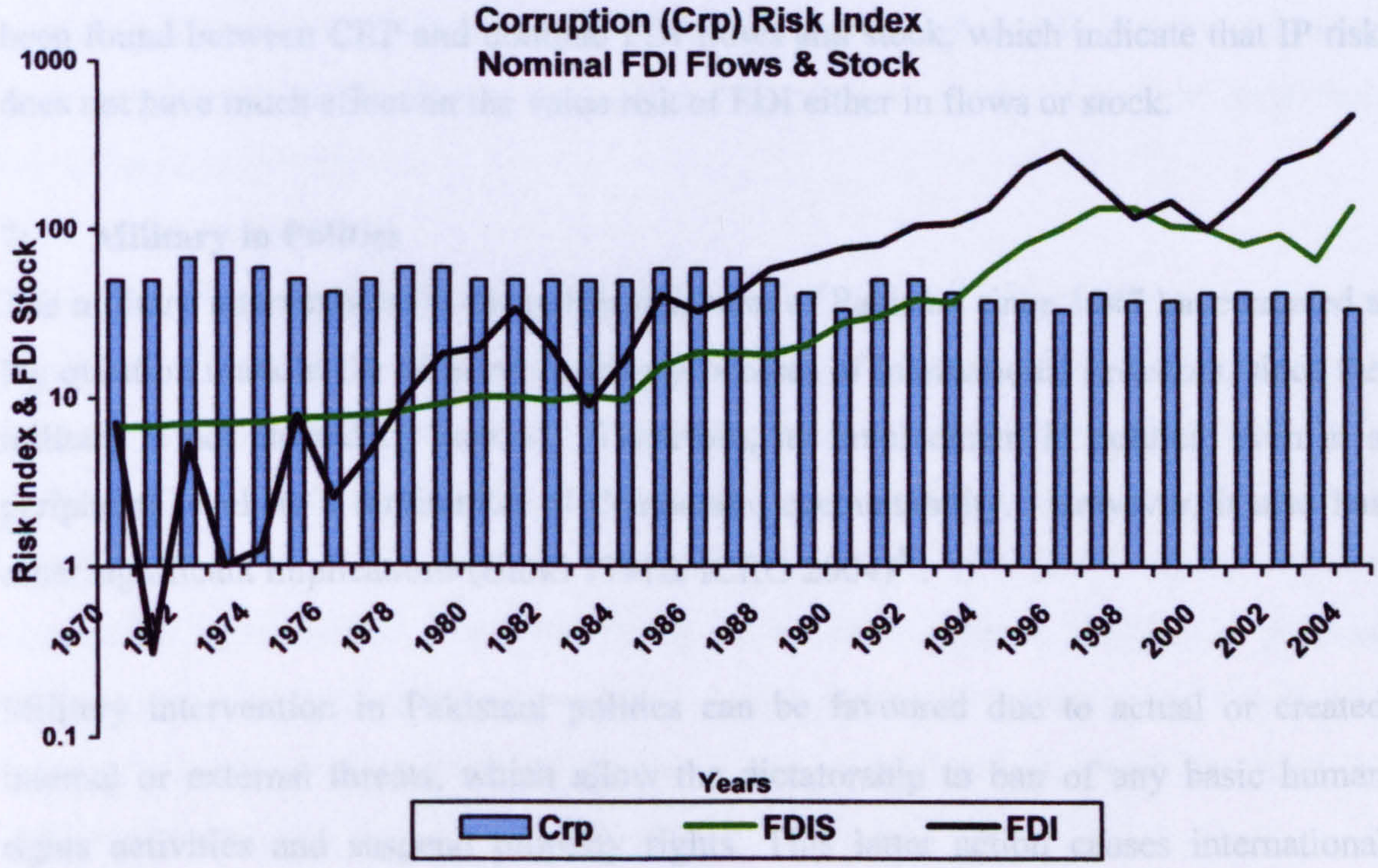
Corruption risk of 2.50 ARP=2.50; TRP=6; (2.50/6)*100=41.67[44] This represents a moderate to high risk during the last days of democratically-elected party rule, which party had a mandate to deliver all basic facilities to the general masses of Pakistan. However, with the passage of time, the corruption in the government itself started growing and reached a higher risk index of 41.67 during 1976. The 1977 military coup

[43] See Appendix-4.2 & 4.3 , section-F (1970-2004)
[44] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

Chart -4.7 (a &b)



Corruption (Crp) Risk Index
Nominal FDI Flows & Stock



Corruption stands highly correlated with both FDI flows and stock at an average of 50-70%, which indicates that it has strong effects on the flows and stock of FDI. A higher correlation coefficient up to 70% between nominal FDI flow and stock and IP respectively has been found, which reveals that the CRP risk index does show a major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and IP. This indicates that the CRP risk level does affect the risk-averse international investors' confidence as it shows a negative correlation. The correlation results with a two-year lag between FDI flows and stock also does not reveal any significant change, which is 53% and 68% with an indication that the corruption has a delayed effect on FDI flow or stock but reacts at the same time as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

In this attempt to identify the factors that are important for the international investors such as protection of capital and profits, the investment profile showed a higher correlation of 50% with real FDI flows and stock, which accords with the better implementation of the 1976 investment act[46]. A correlation of an average of 64% has been found between CRP and nominal FDI flows and stock, which indicate that IP risk does not have much effect on the value risk of FDI either in flows or stock.

7: Military in Politics

The military interventions in the political system of Pakistan since 1947 have created a big question mark in the decision-making processes of international investors, since the military is not elected by anyone. Therefore, its involvement in politics, even at a peripheral level, is a diminution of democratic accountability. However, it also has other significant implications (Burki 1991& ICRG 2004)[47].

Military intervention in Pakistani politics can be favoured due to actual or created internal or external threats, which allow the dictatorship to ban of any basic human rights activities and suspend property rights. This latter action causes international investors to have second thought s about investing in Pakistan. Such a situation would

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[46] See Appendix-4.2, section-C (1970-2005)
[47] See Appendix-4.2 section-G (1970-2004)

imply the distortion of government policy in order to meet this threat, for example by increasing the defence budget at the expense of other budget allocations.

The threat of military take-over has forced all elected governments of Pakistan to change policies to those more amenable to the military's wishes. Despite the low power of the military in politics, it still represents a high risk as the government is unable to function effectively and this makes the country an uneasy environment for foreign businesses.

A full-scale military regime poses the greatest risk. In the short term a military regime may provide a new stability and thus reduce business risks. However, in the longer term the risk will almost certainly rise, partly because the system of governance will be become corrupt and partly because the continuation of such a government is likely to create an armed opposition (ICRG-2004).

The 'military in politics' component consists of a single subcomponent: involvement in government directly or indirectly, which is allocated six risk points thereby indicating that the higher or lower risk of the military in politics is only dependent upon their involvement in government.

Military in Politics risk of 0 ARP=0; TRP=6; (0/6)*100=0[48]. The highest risk for the period of 1977-1981 was due to the military takeover in Pakistan and the imposition of martial law. The risk profile remained above an average of 50% throughout 1978-1999 as the military involvement reduced but still the danger of intervention remained at high risk. The involvement risk again went high to 16.67% for 1999-2004 when an elected democratic government was toppled by a military general, despite a political government then coming into power. The actual powers remained in the hands of a military general as the uniformed civilian president of Pakistan, which has kept the involvement risk at a higher level of 41.67%[49].

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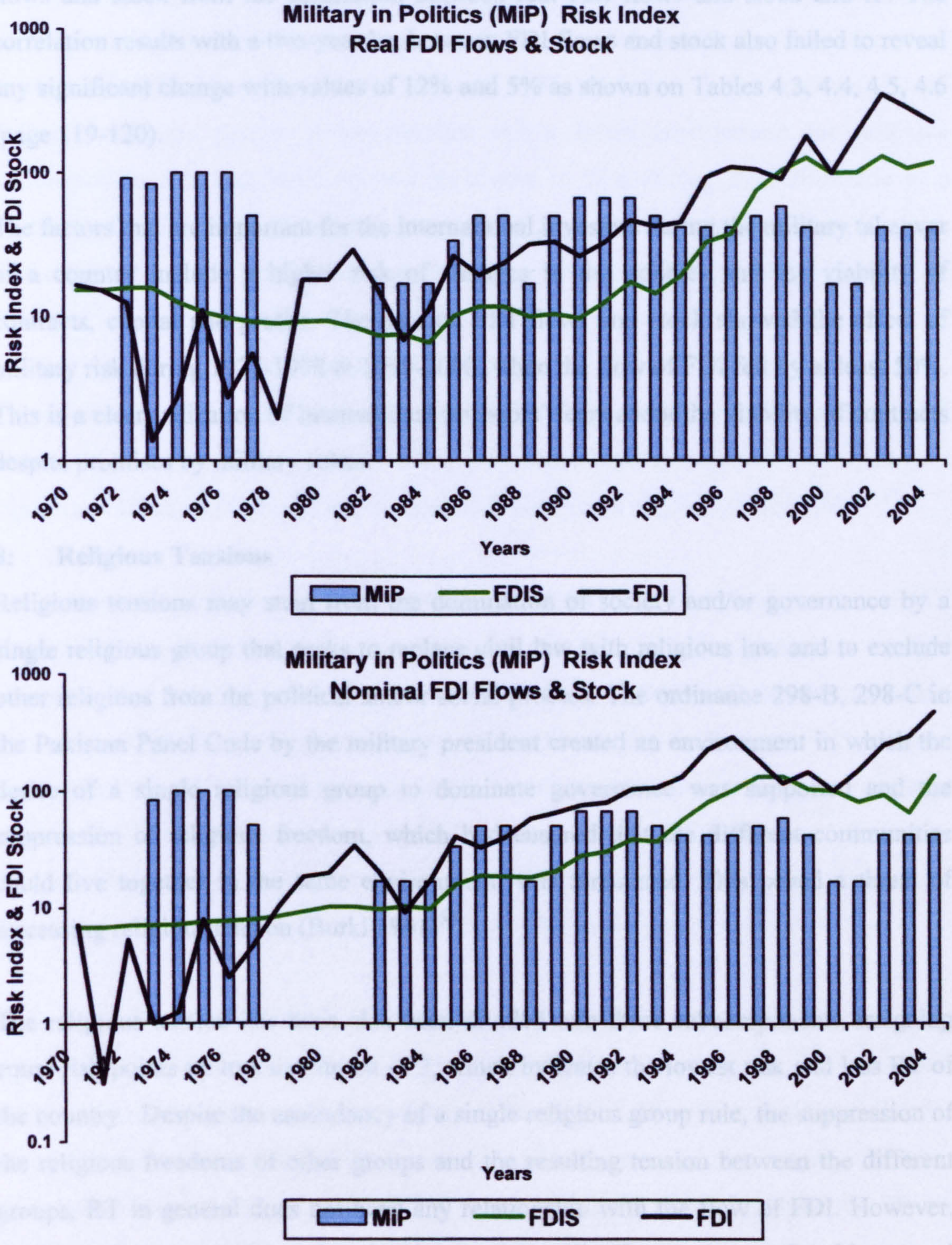
[48] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

[49] See Appendix-4.2, section-C (1970-2005)

Chart -4.8 (a & b)



Correlations of -7% and -3% have been found between military in politics and real FDI flows and stock respectively for 1970-2004, which indicates that the MIP has little effect on the flows and stock of FDI. The correlation between nominal FDI flow and stock and MIP remained approximately at the same level, which reveals that the MIP

risk index does not show any major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and IP. The correlation results with a two-year lag between FDI flows and stock also failed to reveal any significant change with values of 12% and 5% as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

The factors that are important for the international investors during the military takeover of a country include a higher risk of changes in the policies and the viability of contracts, capital and profits. The data on FDI flows and stock showed the effect of military risk during 1977-1978 & 1999-2000, when the flow of FDI fell by at least 50%. This is a clear indication of international investors' fears about the viability of contracts despite promises by military rulers.

8: Religious Tensions

Religious tensions may stem from the domination of society and/or governance by a single religious group that seeks to replace civil law with religious law and to exclude other religions from the political and/or social process. The ordinance 298-B, 298-C in the Pakistan Panel Code by the military president created an environment in which the desire of a single religious group to dominate governance was supported and the suppression of religious freedom, which had ensured that the different communities could live together in the same environment, was threatened. This posed a threat of increasing religious tension (Burki 1991)[50].

The religious tension has been also been divided into three subcomponents assigning equal risk points up to a maximum of 2, which indicates the lowest risk and less RT of the country. Despite the ascendancy of a single religious group rule, the suppression of the religious freedoms of other groups and the resulting tension between the different groups, RT in general does not have any relationship with the flow of FDI. However, the fears of a worsening law & order situation can still affect the international investors' confidence.

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[50] See Appendix-4.2 & 4.3 , section-H (1970-2004)

Religious Tension risk of 2.5 ARP=2.5; TRP=6; (2.5/6)*100=41.67[51] was equivalent to very nearly moderate risk tending towards higher risk during 1982-84 due to the killing of religious leaders by different religious groups. The risk profile remained above an average of 50% throughout 1970-1982 and 1985-2004 due to the involvement of different religious groups in government and a better environment for religious understanding. The risk level reached its lowest at 58% during 2000-2004 due to a coalition of all religious parties and groups being represented in the elected parliament. The opposition leader of the parliament is also a leader of a major religious party in Pakistan[52].

Correlations of -23% and -17% have been found between religious tension and real FDI flows and stock respectively for 1970-2004, which indicates that RT does have a significant effect on the flows and stock of FDI showing a negative relationship

An increased correlation of 28% between nominal FDI flow and stock and RT respectively has been found, which reveals that the RT risk index does show a major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and RT. This indicates that the domestic RT risk level does affect the risk-averse international investors' confidence as it reveals a negative correlation. The correlation results for a 2-year lag between FDI flows and stock also does not reveal any significant change, and at 23%, indicates that RT affect directly the FDI flows and stock as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

In this attempt to identify those factors that are important for the international investors like protection of their capital and profits, despite higher labour costs, the investment profile showed a higher correlation of 50% with real FDI flows and stock revealing the better implementation of the 1976 investment act[53]. An average correlation of 64% has been found between IP and nominal FDI flows and stock, which indicates that IP risk does not have much effect on the value risk of FDI either in flows or stock.

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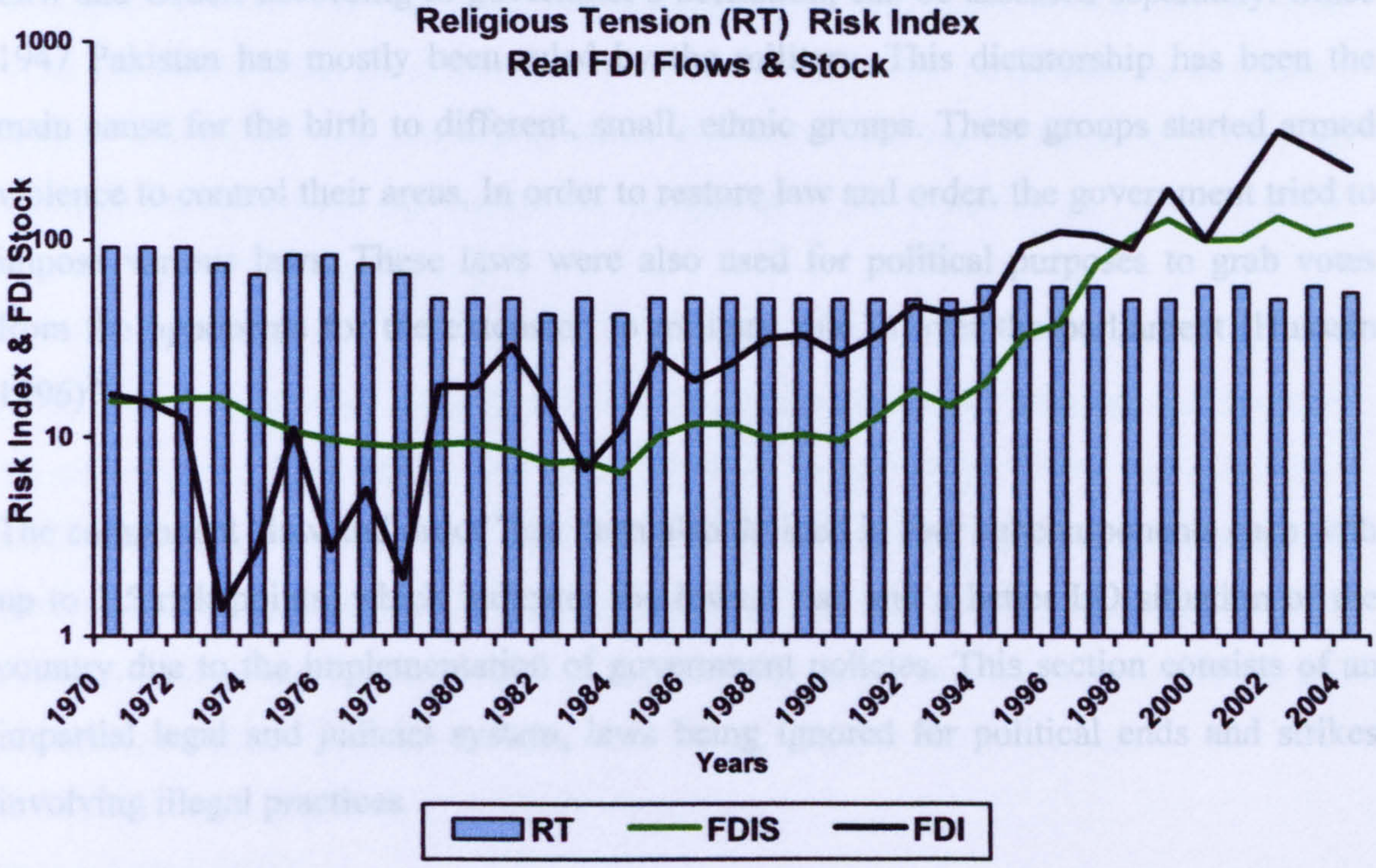
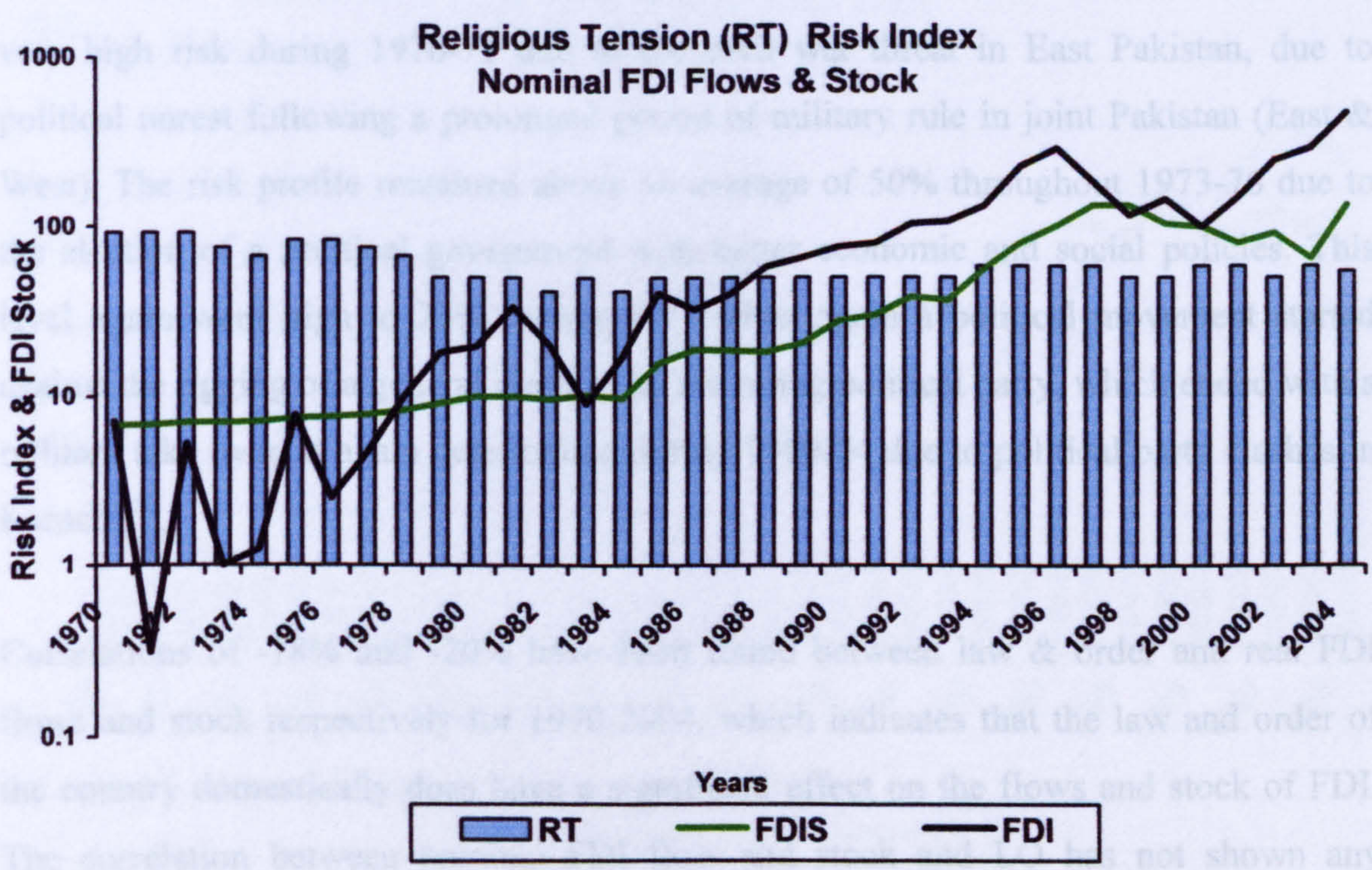
[51] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

[52] See Appendix-4.2, section-C (1970-2005)

Chart -4.9 (a & b)





[53] See Appendix-4.2, section-C (1970-2005)

9: Law and Order

Law and Order, according to governmet's definition, can be assessed separately. Since 1947 Pakistan has mostly been ruled by the military. This dictatorship has been the main cause for the birth to different, small, ethnic groups. These groups started armed violence to control their areas. In order to restore law and order, the government tried to impose various laws. These laws were also used for political purposes to grab votes from the opponents for the extension to military rule in over the parliament (Hussain 1996)[54].

The component "law and order" has been also divided in four subcomponents each with up to 1.5 risk points, which indicates the lowest risk and a better LO situation of the country due to the implementation of government policies. This section consists of an impartial legal and judicial system, laws being ignored for political ends and strikes involving illegal practices.

Law & Order risk of 1 ARP=1; TRP=6; (1/6)*100=16.67[55] showed that there was a very high risk during 1970-71 due to the civil war threat in East Pakistan, due to political unrest following a prolonged period of military rule in joint Pakistan (East & West). The risk profile remained above an average of 50% throughout 1973-76 due to the election of a political government with better economic and social policies. This level again went high to 25% during 1977 when again a political movement started against the rigging of a general election by the ruling political party, which ended with a military take over. It again deteriorated during 1980-84 due to political party clashes in Karachi.[56].

Correlations of -18% and -20% have been found between law & order and real FDI flows and stock respectively for 1970-2004, which indicates that the law and order of the country domestically does have a significant effect on the flows and stock of FDI. The correlation between nominal FDI flow and stock and LO has not shown any significant change, being at minus 22%, which reveals that the LO risk index does not

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[54] See Appendix-4.2 & 4.3 , section-I (1970-2004)

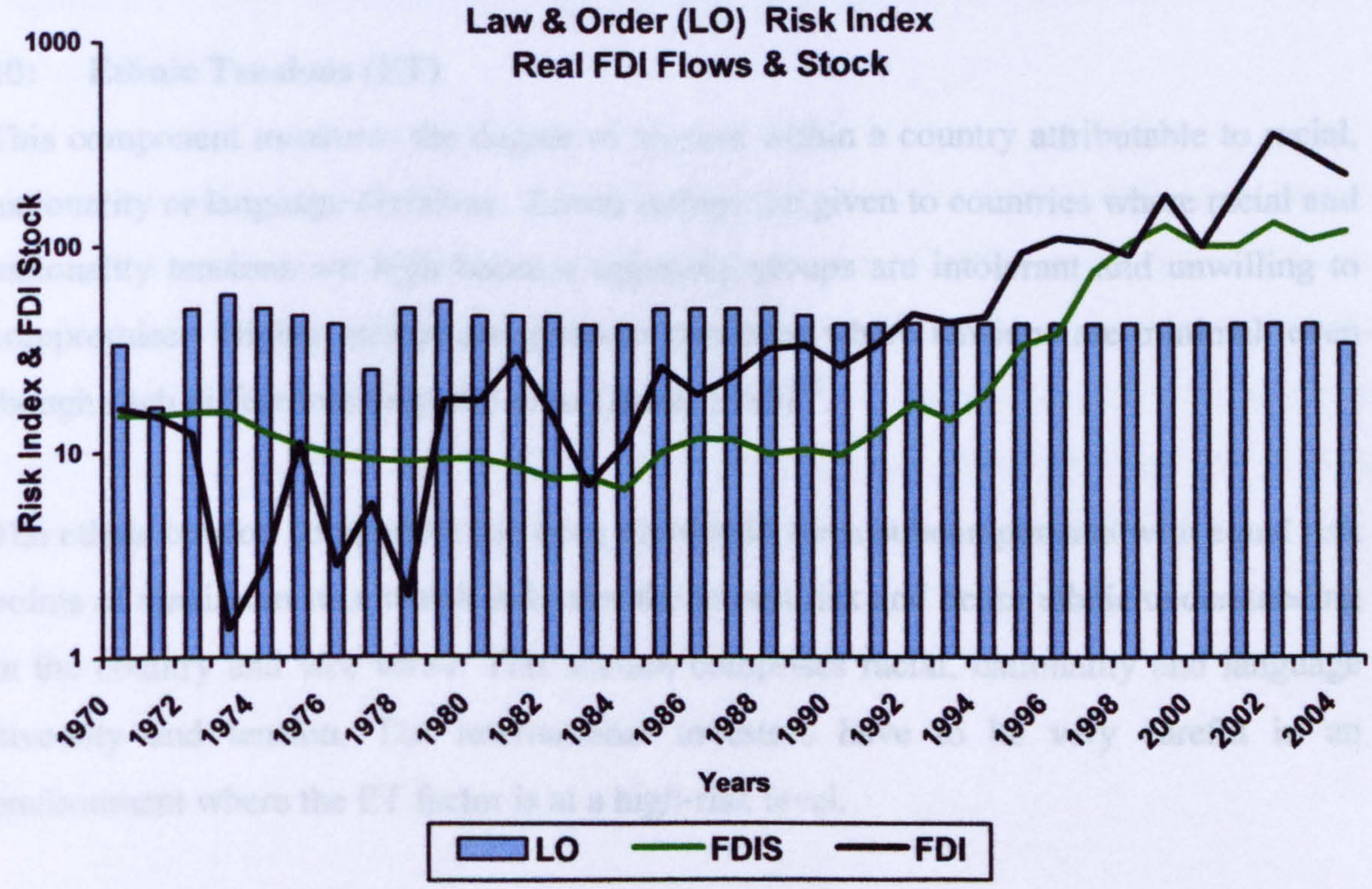
[55] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system. Source: Political Risk Services USA-1994

[56] See Appendix-4.2, section-C (1970-2005)

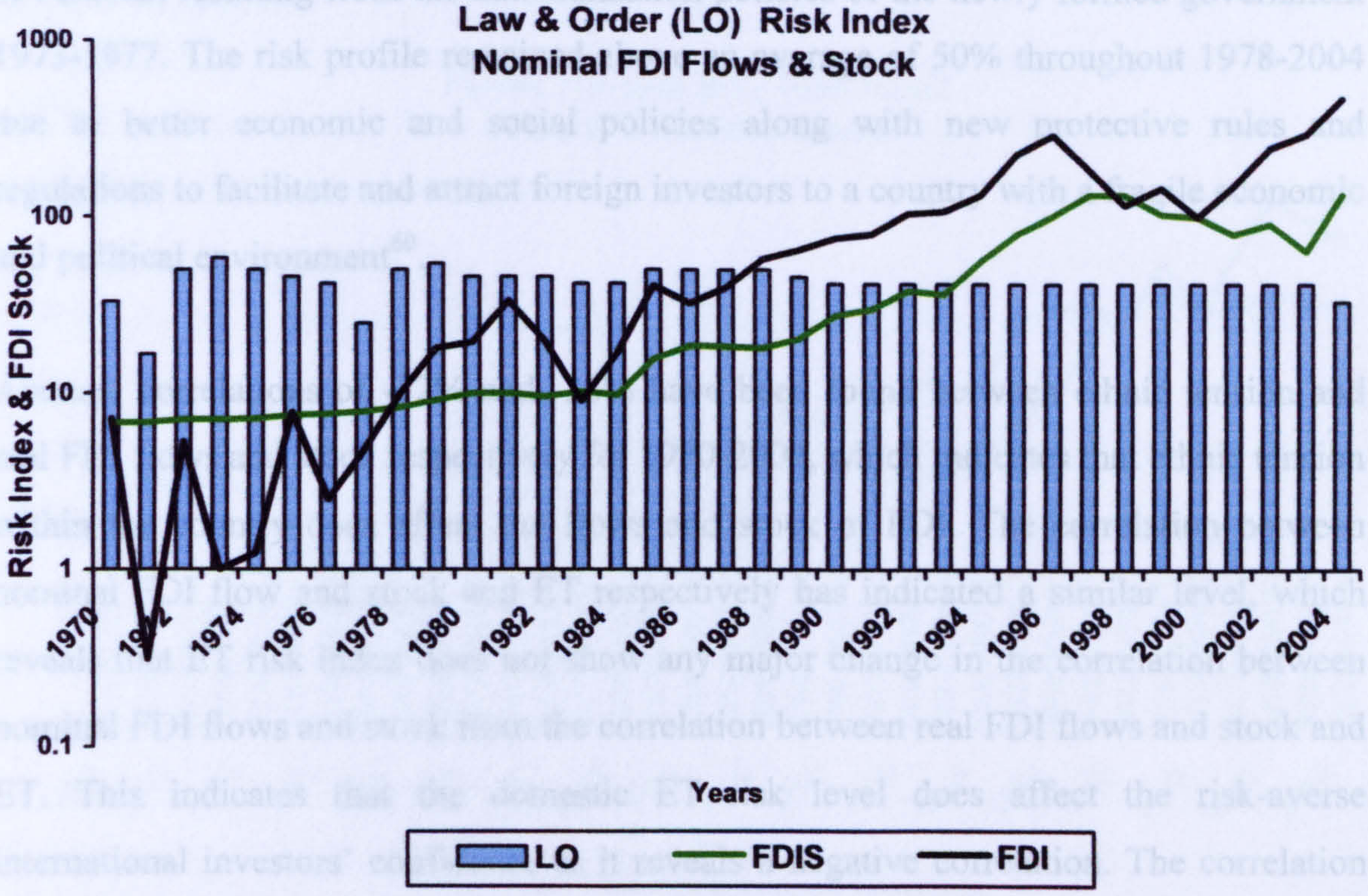
any major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and LO. This indicates that the domestic IP risk level does affect the risk-averse international investors' confidence as it reveals a negative correlation. The correlation results for a two-year lag between FDI flows and stock also do not reveal any significant change, at -22% as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

In this attempt to identify those factors that are important for the international investors like protection of their capital and profits, despite higher labour costs, the investment profile showed a correlation of 50% with real FDI flows and stock, which reveals the better implementation of the 1976 investment act[57]. An average correlation of 64% has been found between LO and nominal FDI flows and stock, which indicates that LO risk does not have much effect on the value risk of FDI either in flows or stock.

Chart -4.10 (a & b)



[57] See Appendix-4.2, section-C (1970-2005)



10: Ethnic Tensions (ET)

This component measures the degree of tension within a country attributable to racial, nationality or language divisions. Lower ratings are given to countries where racial and nationality tensions are high because opposing groups are intolerant and unwilling to compromise. Higher ratings are given to countries where tensions are minimal, even though such differences may still exist (Burki 1980)[58].

The ethnic tension component has been divided in three subcomponents with equal risk points of maximum two, which indicates the lowest risk and better ethnic understanding in the country and *vice versa*. This section comprises racial, nationality and language diversity and tension. The international investors have to be very careful in an environment where the ET factor is at a high-risk level.

Ethnic Tension Risk of 1.5 ARP=1.5; TRP=6; (1.5/6)*100=25.00[59]. This indicates a very high risk during 1970-71 due to an ethnic and civil war threat in the eastern wing

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[58] See Appendix-4.2 & 4.3 , section-J (1970-2004)

[59] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

of Pakistan resulting from the nationalization policies of the newly formed government 1973-1977. The risk profile remained above an average of 50% throughout 1978-2004 due to better economic and social policies along with new protective rules and regulations to facilitate and attract foreign investors to a country with a fragile economic and political environment[60].

Average correlations of -32% and -38% have been found between ethnic tension and real FDI flows and stock respectively for 1970-2004, which indicates that ethnic tension within the country does affect the flows and stock of FDI. The correlation between nominal FDI flow and stock and ET respectively has indicated a similar level, which reveals that ET risk index does not show any major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and ET. This indicates that the domestic ET risk level does affect the risk-averse international investors' confidence as it reveals a negative correlation. The correlation results for a two-year lag between FDI flows and stock also do not reveal any significant change with values of -33% and -38% as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

In this attempt to identify those factors that are important for the international investors like protection of their capital and profits, despite higher labour costs, the investment profile showed a higher correlation of 50% with real FDI flows and stock revealing the better implementation of the 1976 investment act[61]. An average correlation of 64% has been found between ET and nominal FDI flows and stock, which indicate that ET risk does not have much effect on the value risk of FDI either in flows or stock.

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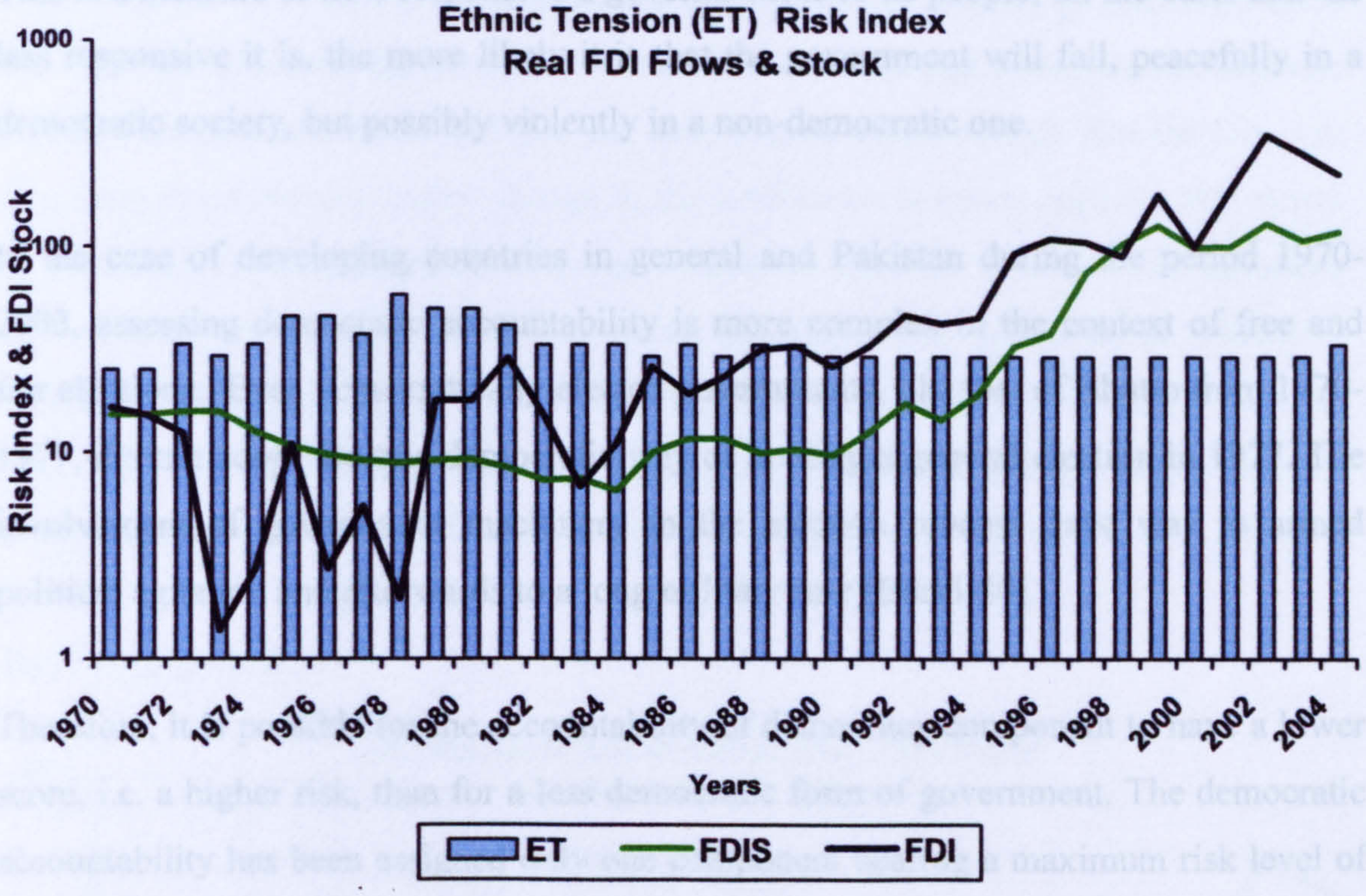
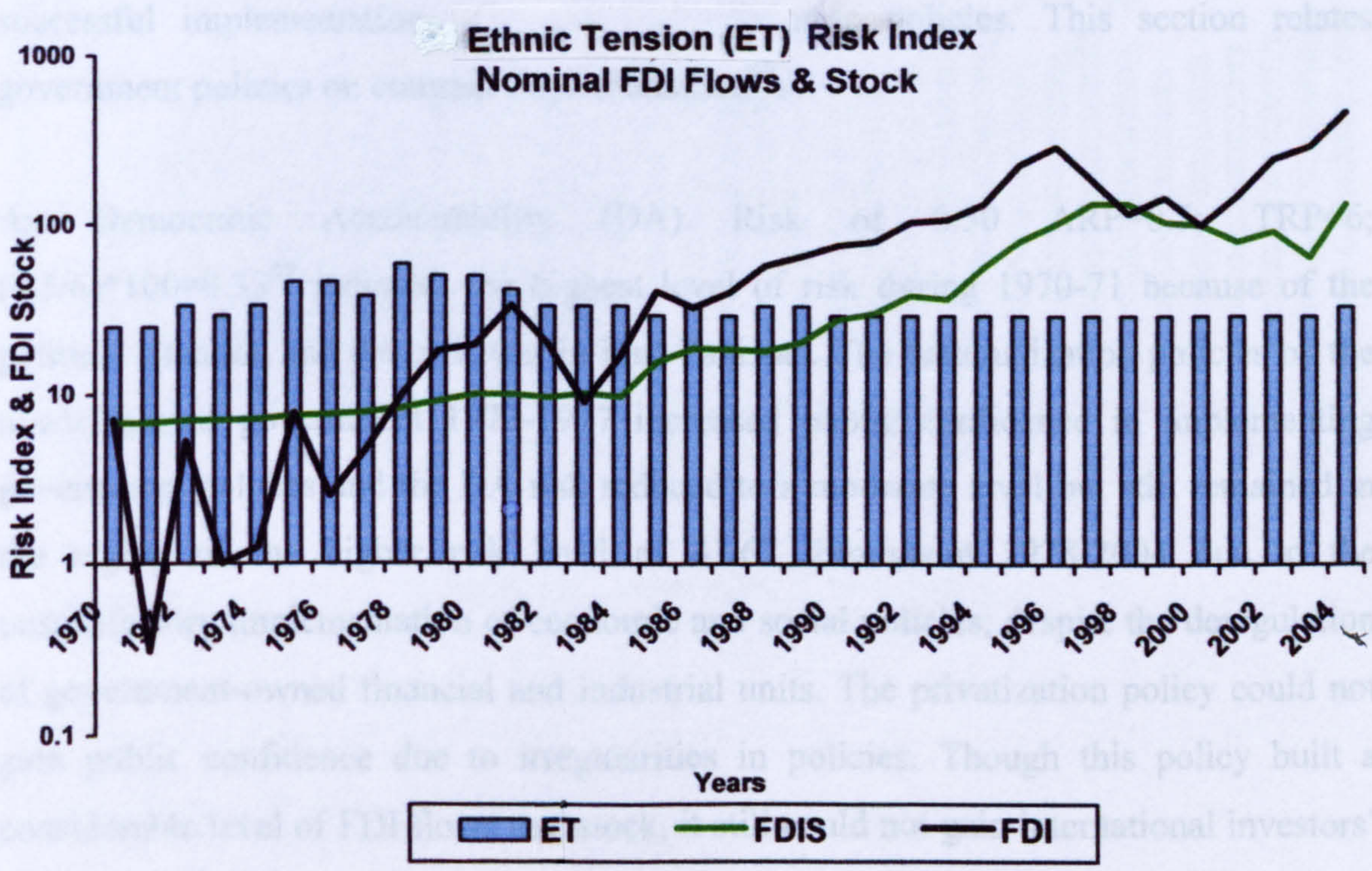
[60] See Appendix-4.3, section-C (1970-2005)
[61] See Appendix-4.3, section-C (1970-2005) and Table 4.1(Correlation Matrix)

Chart -4.11 (a & b)


Ethnic Tension (ET) Risk Index
Real FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
ET
FDIS
FDI


Ethnic Tension (ET) Risk Index
Nominal FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
0.1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
ET
FDIS
FDI

11: Democratic Accountability (DA)

This is a measure of how responsive a government is to its people, on the basis that the less responsive it is, the more likely it is that the government will fall, peacefully in a democratic society, but possibly violently in a non-democratic one.

In the case of developing countries in general and Pakistan during the period 1970-2003, assessing democratic accountability is more complex in the context of free and fair elections. Even democratically elected governments, like that of Bhutto from 1970-1977, did not adopt the true democratic way of holding a general election in 1977. The involvement of government machinery in the election process gave way to armed political agitation and afterwards to a long military rule (Burki-80).

Therefore, it is possible for the accountability of democracy component to have a lower score, i.e. a higher risk, than for a less democratic form of government. The democratic accountability has been assigned only one component bearing a maximum risk level of six, which indicates the lowest risk and better DA of a country's government in the successful implementation of social and economic policies. This section relates government policies on contract implementation[62].

An Democratic Accountability (DA) Risk of 0.50 ARP=0.5; TRP=6; (0.5/6)*100=8.33[63] indicates the highest level of risk during 1970-71 because of the political situation and the civil war in East Pakistan. The nationalization policies by the newly-formed government 1973-1977 increased public confidence in implementing government policies and the DA risk reduced to a moderate level but still remained in the region of the higher risk level of 41.67 throughout 1978-2004 due to the unsatisfactory implementation of economic and social policies, despite the deregulation of government-owned financial and industrial units. The privatization policy could not gain public confidence due to irregularities in policies. Though this policy built a considerable level of FDI flows and stock, it still could not gain international investors' confidence.[64]

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[62] See Appendix-4.2 & 4.3 , section-K (1970-2004)

[63] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

11: Democratic Accountability (DA)

This is a measure of how responsive a government is to its people, on the basis that the less responsive it is, the more likely it is that the government will fall, peacefully in a democratic society, but possibly violently in a non-democratic one.

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An Democratic Accountability (DA) Risk of 0.50 ARP=0.5; TRP=6; (0.5/6)*100=8.33[63] indicates the highest level of risk during 1970-71 because of the political situation and the civil war in East Pakistan. The nationalization policies by the newly-formed government 1973-1977 increased public confidence in implementing government policies and the DA risk reduced to a moderate level but still remained in the .region of the higher risk level of 41.67 throughout 1978-2004 due to the unsatisfactory implementation of economic and social policies, despite the deregulation of government-owned financial and industrial units. The privatization policy could not gain public confidence due to irregularities in policies. Though this policy built a considerable level of FDI flows and stock, it still could not gain international investors' confidence.[64]

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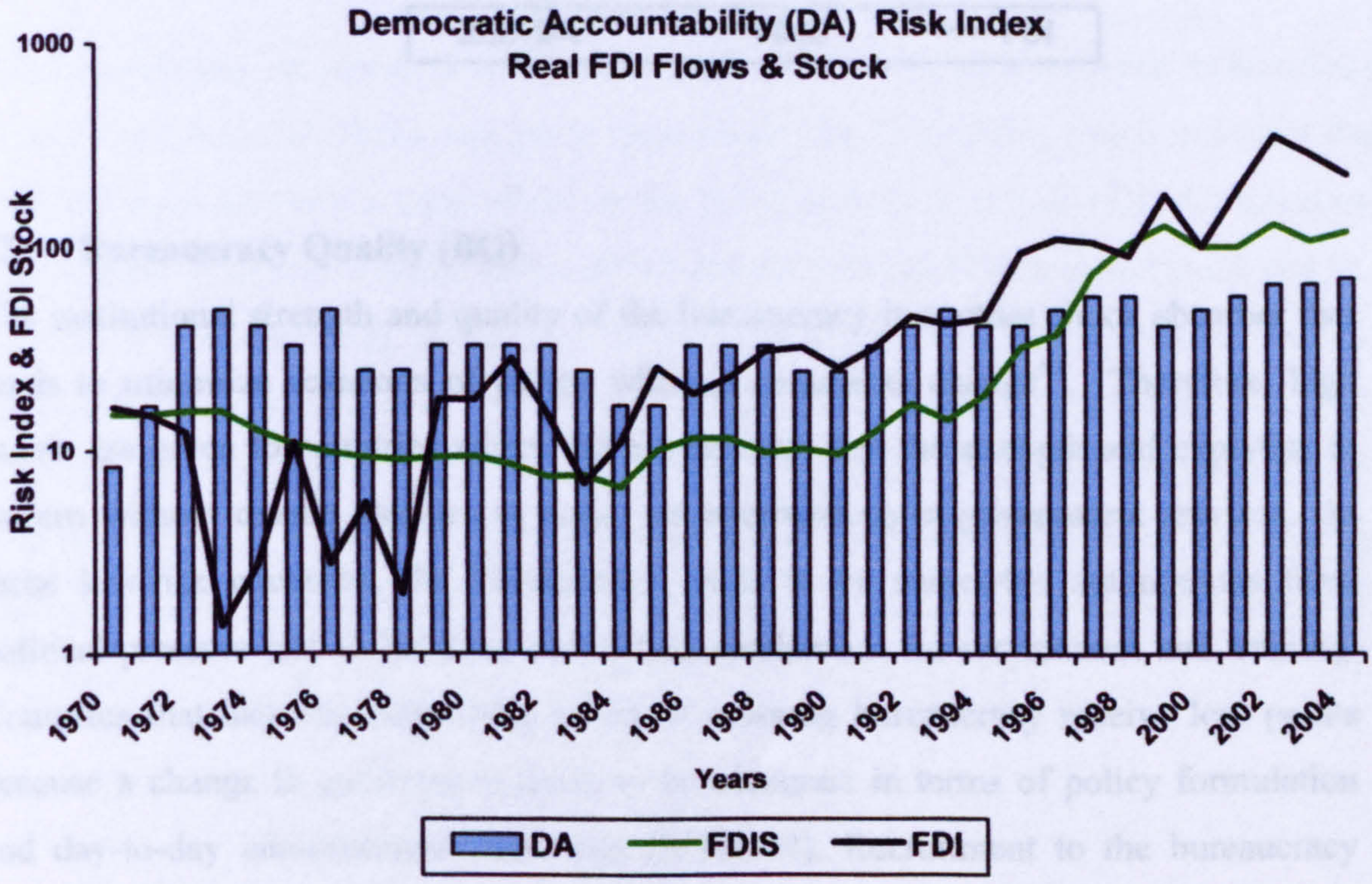
[62] See Appendix-4.2 & 4.3 , section-K (1970-2004)

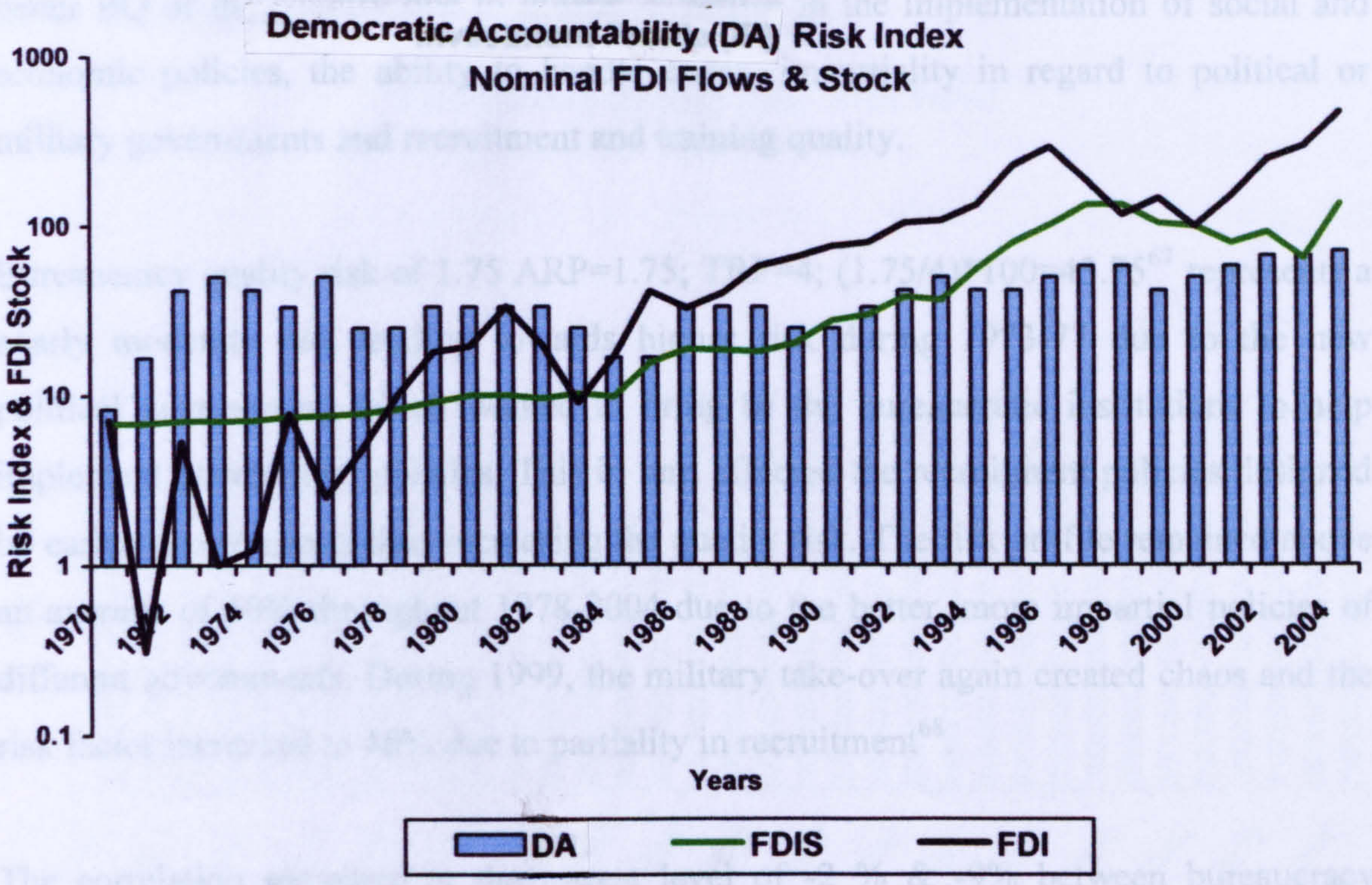
[63] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

A high correlation of 73% has been found between DA and real FDI flows and stock respectively for 1970-2004, which indicates that DA of the country governments does have lot of the effect on the flows and stock of FDI. No change in correlation between nominal FDI flow and stock and DA has been found, which reveals that the DA risk index does not show any major change in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and DA. This indicates that the domestic DA risk level does affect the risk-averse international investors' confidence as it reveals a positive correlation. The correlation results for a two-year lag between FDI flows and stock also do not reveal any significant change with a value of 73% as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

Chart -4.12 (a &b)



[64] See Appendix-4.3, section-C (1970-2005)



12: Bureaucracy Quality (BQ)

The institutional strength and quality of the bureaucracy is another shock absorber that tends to minimize revisions of policy when governments change[65]. Therefore, high points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruitment and training. Countries that lack the cushioning effect of a strong bureaucracy receive low points because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions (ICRG-94). Recruitment to the bureaucracy was politically-based during and after 1970. This was the time when Pakistan actually needed talented youngsters to control the country as the eastern part was separated from Pakistan (Omar 1985)[66].

The bureaucracy quality component has also been divided in four subcomponents each with equal risk points up to a maximum of one, which indicates the lowest risk and

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[65] See Appendix-4.2 & 4.3 , Section L (1970-2004)
[66] See Appendix-4.3 section-B (1970-2004)

better BQ of the country due to greater expertise in the implementation of social and economic policies, the ability to handle crises, impartiality in regard to political or military governments and recruitment and training quality.

Bureaucracy quality risk of 1.75 ARP=1.75; TRP=4; (1.75/4)*100=43.75[67] represents a nearly moderate risk tending towards higher risk during 1973-77 due to the new political government, which wanted to bring **in** the bureaucratic institutions to help implement government policies. This in turn affected the recruitment policies designed by earlier governments thus increasing the quality risk. The risk profile remained above an average of 50% throughout 1978-2004 due to the better, more impartial policies of different governments. During 1999, the military take-over again created chaos and the risk factor increased to 40% due to partiality in recruitment[68].

The correlation remained at the lowest level of -2 % & -9% between bureaucracy quality and real FDI flows and stock respectively for 1970-2004, which indicates that the BQ does not have a large effect on the flows and stock of real FDI. An increased correlation of minus 16% and minus 30% between nominal FDI flow and stock and BQ reveals that the BQ risk index does show major changes in the correlation between nominal FDI flows and stock from the correlation between real FDI flows and stock and BQ. This indicates that BQ risk level does affect the risk-averse international investors' confidence as it reveals a negative correlation. The correlation results for a two-year lag between FDI flows and stock also do not reveal any significant change with values of -2% and -19% as shown on Tables 4.3, 4.4, 4.5, 4.6 (page 119-120).

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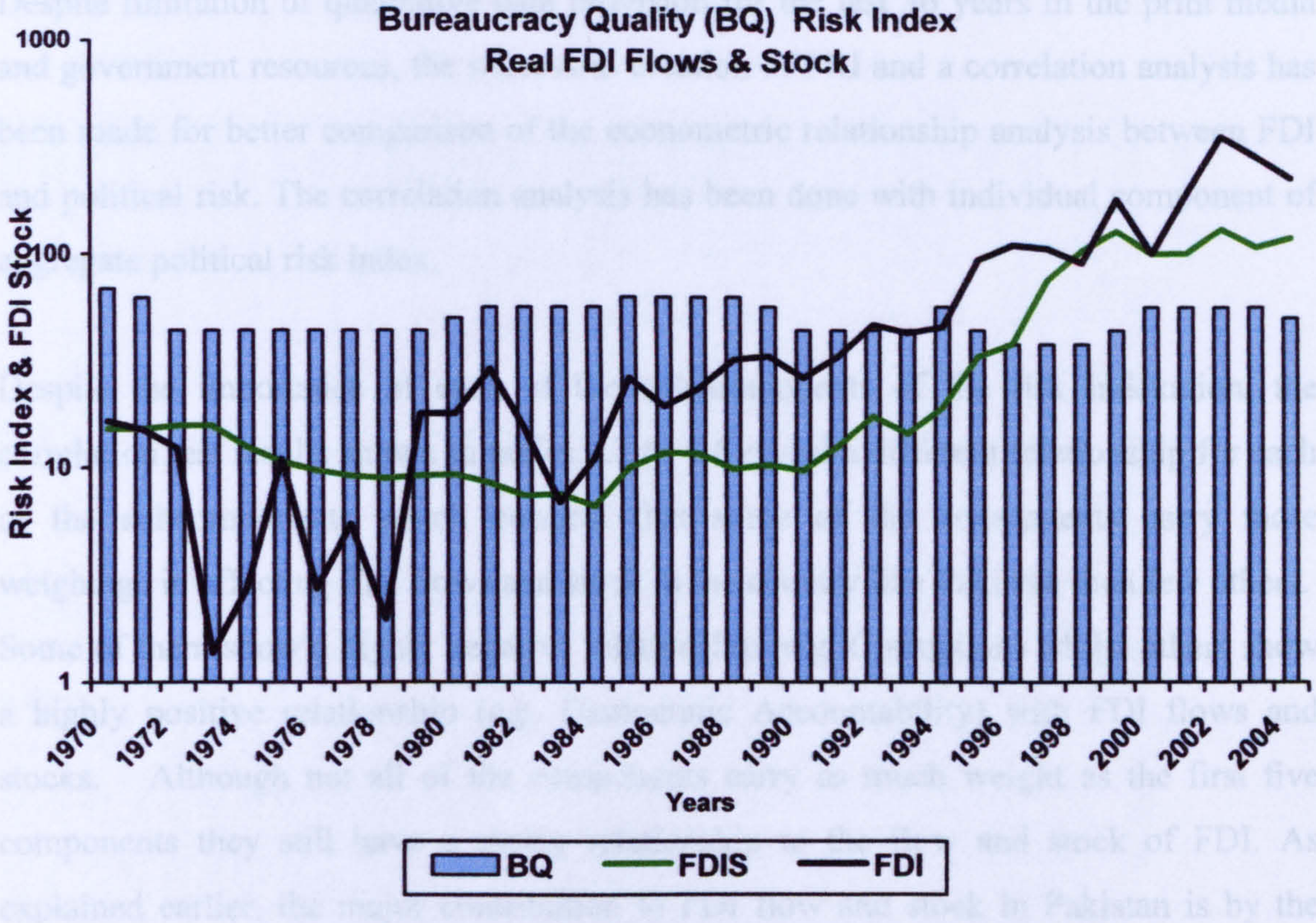
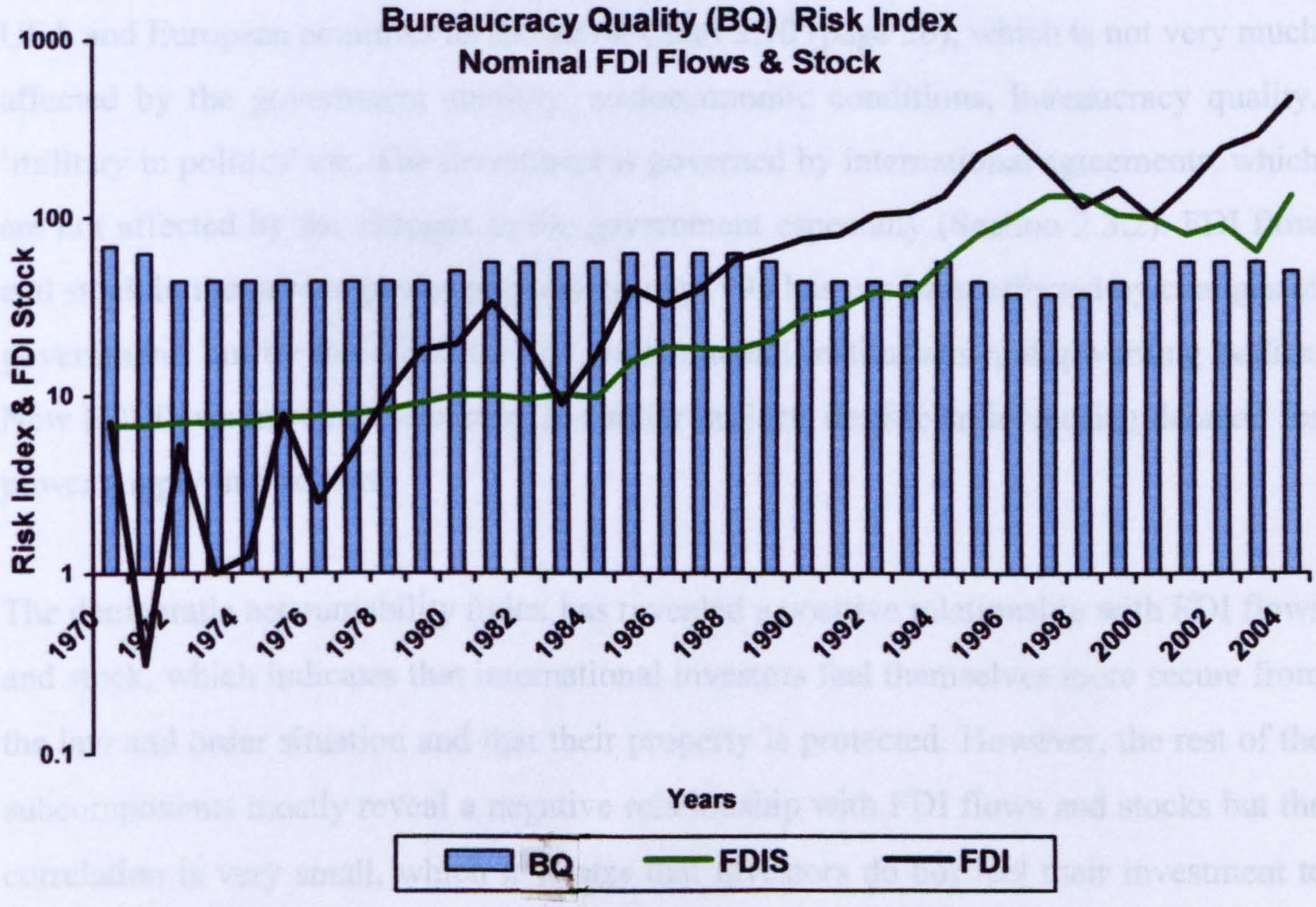
[67] ARP=Actual risk points (calculated through qualitative information for Pakistan 1970-2004)
TRP=Total risk points (Total weight age points given to each component in ICRG methodology)
Source: ICRG rating system Source: Political Risk Services USA-1994

[68] See Appendix-4.3, section-C (1970-2005)

Chart -4.13 (a & b)


Bureaucracy Quality (BQ) Risk Index
Real FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
1970
1972
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
BQ
FDIS
FDI


Bureaucracy Quality (BQ) Risk Index
Nominal FDI Flows & Stock
Risk Index & FDI Stock
1000
100
10
1
0.1
1970
1974
1976
1978
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
Years
BQ
FDIS
FDI

4.9 Correlation Analysis

Despite limitation of qualitative data provision for the last 36 years in the print media and government resources, the successful creation of PRI and a correlation analysis has been made for better comparison of the econometric relationship analysis between FDI and political risk. The correlation analysis has been done with individual component of aggregate political risk index.

Despite the importance of each of the subcomponents of the risk indexation, the correlation test results shown in tables 4.3 to 4.6 reveal a different relationship for each of the subcomponents which confirm that some of the components carry more weightage in affecting FDI flows and stock in the country like Pakistan than few others. Some of them show a highly negative relationship (e.g. Corruption) whilst others show a highly positive relationship (e.g. Democratic Accountability) with FDI flows and stocks. Although not all of the components carry as much weight as the first five components they still have a strong relationship to the flow and stock of FDI. As explained earlier, the major contribution to FDI flow and stock in Pakistan is by the USA and European countries as shown on Chart 2.10 (page 20), which is not very much affected by the government stability, socioeconomic conditions, bureaucracy quality, 'military in politics' etc. The investment is governed by international agreements, which are not affected by the changes in the government especially (Section 2.3.2). FDI flow and stock in the private power projects during 1993 has not been affected by changes of government, but by the corruption of governmental institutions and governing bodies. New FDI flows have not been seen in similar projects despite an increasing demand for power supply in Pakistan.

The democratic accountability index has revealed a positive relationship with FDI flows and stock, which indicates that international investors feel themselves more secure from the law and order situation and that their property is protected. However, the rest of the subcomponents mostly reveal a negative relationship with FDI flows and stocks but the correlation is very small, which indicates that investors do not feel their investment to be secure in Pakistan. The reason may be linked to the privatization policy of the government, which is seeking to attract more investment.

Table 4.2

Pakistan: Data for General Correlation analysis

	FDI(N)	FDI	FDIS(N)	FDIS													PRI
					GS	SC	IP	IC	EC	Crp	MiP	RT	LO	ET	DA	BQ	
1970	23	12	468	238	8.33	41.66	16.67	45.83	45.83	50.00	0.00	91.67	33.33	25.00	8.33	68.75	52 25
1971	1	11	469	238	8.33	41.66	16.67	12.50	29.17	50.00	0.00	91.67	16.67	25.00	16.67	62.50	44.50
1972	17	9	486	247	41.67	58.33	33.33	58.33	41.67	66.67	91.67	91.67	50.00	33.33	41.67	43.75	78.25
1973	0.001	1	486	247	83.33	62.50	33.33	37.50	33.33	66.67	83.33	75.00	58.33	29.17	50 00	43.75	78.75
1974	4	2	490	198	75.00	70.83	37.50	45.83	45.83	58.33	100.00	66.67	50.00	33 33	41 67	43.75	80.25
1975	25	8	515	168	75.00	58.33	41.67	62.50	54.17	50.00	100.00	83.33	45.83	45 83	33.33	43.75	83.25
1976	8	2	523	153	66.67	45.83	45.83	66.67	45.83	41.67	100.00	83.33	41.67	45 83	50.00	43.75	81.25
1977	15	4	538	144	25.00	37.50	41.67	29.17	37.50	50.00	50.00	75.00	25.00	37.50	25 00	43 75	57.25
1978	32	8	570	140	33.33	54.17	54.16	75.00	37.50	58.33	0.00	66.67	50.00	58 33	25 00	43.75	66.75
1979	58	13	628	144	50.00	58.33	70.83	79.17	37.50	58.33	0.00	50.00	54.16	50.00	33.33	43.75	70.25
1980	63	13	691	146	54.16	54.17	70.83	58.33	41.67	50.00	0.00	50.00	45.83	50.00	33.33	50 00	67.00
1981	108	21	694	133	66.67	54.17	66.67	41.67	45.83	50.00	0.00	50.00	45.83	41.60	33.33	56 25	66.25
1982	64	11	663	116	58.33	50.00	62.50	33.33	45.83	50.00	16.67	41.67	45.83	33 33	33 33	56 25	63 25
1983	29	5	706	118	66.67	45.83	58.33	14.58	45.83	50.00	16.67	50.00	41.67	33.33	25 00	56 25	60.50
1984	55	8	677	103	54.16	54.17	66.67	14.58	41.67	50.00	16.67	41.67	41.67	33.33	16 67	56 25	58.50
1985	131	19	1079	157	70.83	62.50	66.67	37.50	45.83	58.33	33.33	50.00	50.00	29.17	16 67	62.50	70 00
1986	105	14	1298	183	70.83	70.83	66.67	20.83	45.83	58.33	50.00	50.00	50.00	33.33	33.33	62.50	73.50
1987	129	17	1351	182	50.00	70.83	66.67	27.08	45.83	58.33	50.00	50.00	50.00	29.17	33.33	62.50	71.25
1988	186	23	1257	155	33.33	70.83	66.67	27.08	50.00	50.00	16.67	50.00	50.00	33.33	33.33	62.50	65.25
1989	210	24	1422	162	45.83	58.33	54.17	29.17	50.00	41.67	50.00	58.33	45.83	33.33	25.00	56.25	65.75
1990	244	19	1928	152	25.00	50.00	52.08	41.67	54.17	33.33	66.67	50.00	41.67	29.17	25.00	43 75	61.50
1991	257	24	2088	197	47.92	56.25	52.08	41.67	54.17	50.00	66.67	50.00	41.67	29.17	33.33	43.75	68 00
1992	335	34	2658	271	47.92	54.17	50.00	41.67	45.83	50.00	66.67	50.00	41.67	29.17	41.67	43.75	67.51
1993	346	31	2546	225	43.75	56.25	50.00	41.67	50.00	41.67	50.00	50.00	41.67	29.17	50.00	43.75	65.75
1994	429	33	3878	298	41.67	54.17	52.05	39.58	50.00	37.50	41.67	58.33	41.67	29.17	41.67	56 25	65.25
1995	736	68	5552	514	41.67	50.00	52.08	39.58	50.00	37.50	41.67	58.33	41.67	29.17	41.67	43 75	63.25
1996	939	80	7017	595	31.25	47.92	52.08	39.58	50.00	33.33	41.67	58.33	41.67	29.17	50 00	37.50	61.50

Table 4.2 (continued)

	FDI(N)	FDI	FDIS(N)	FDIS	GS	SC	IP	IC	EC	Crp	MiP	RT	LO	ET	DA	BQ	PRI
1997	601	77	9234	1184	45.83	54.17	50.00	43.75	50.00	41.67	50.00	58.33	41.67	29.17	58 33	37.50	67.25
1998	376	66	9247	1622	43.75	56.25	50.00	43.75	39.58	37.50	58.33	50.00	41.67	29.17	58.33	37.50	65.50
1999	470	131	7183	1995	47.92	56.25	52.08	43.75	39.58	37.50	41.67	50.00	41.67	29 17	41.67	43.75	63.00
2000	322	73	6912	1571	29.17	56.25	52.08	50.00	39.58	41.67	16.67	58.33	41.67	29.17	50.00	56.25	62.50
2001	485	139	5536	1582	31.25	50.00	52.08	50.00	43.75	41.67	16.67	58.33	41.67	29.17	58.33	56.25	63 50
2002	798	257	6359	2051	41.67	52.08	50.00	50.00	50.00	41.67	41.67	50.00	41.67	29.17	66.67	56.25	68.50
2003	950	207	4467	1687	52.08	52.08	50.00	50.00	50.00	41.67	41.67	58.33	41.67	29.17	66.67	56 25	70 75
2004	1,524	207	9288	1858	56.25	52.08	56.25	52.08	45.83	33.33	41.67	54.16	33.33	33.33	70.80	50 00	69.50
2005	1,524	207	9288	1858													
2006	1,524	207	9288	1858													

GS=Government Stability; SC=Socioeconomic Conditions; IP=Investment Profile; IC=Internal Conflict; EC=External Conflict; Crp=Corruption; MiP=Military in Politics; RT=Religious Tension; LO=Law and Order; ET=Ethnic Tension; DA=Democratic Accountability; BQ=Bureaucracy Quality

FDI(N) = Nominal FDI flows; FDI=Real FDI flows; FDIS(N) Nominal FDI stock; FDIS = Real FDI stock.

Table 4.3
Estimated Correlation Matrix of Variables **FDIS (Real)**

	FDI	GS	SC	IP	IC	EC	CRP	MIP	RT	LO	ET	DA	BQ	PR
FDI	1.00													
GS	-0.15	1.00												
SC	-0.10	0.50	1.00											
IP	-0.04	0.37	0.40	1.00										
IC	0.19	0.06	-0.02	-0.01	1.00									
EC	-0.01	0.13	0.14	0.24	0.02	1.00								
CRP	-0.54	0.35	0.43	-0.44	0.01	-0.41	1.00							
MIP	-0.03	0.42	0.27	-0.30	0.13	0.31	0.05	1.00						
RT	-0.17	-0.24	-0.31	-0.84	0.21	-0.30	0.26	0.29	1.00					
LO	-0.20	0.62	0.75	0.48	0.31	0.16	0.46	0.21	-0.31	1.00				
ET	-0.38	0.27	0.03	0.33	0.60	-0.17	0.29	-0.13	0.06	0.32	1.00			
DA	0.74	0.17	0.08	0.03	0.34	0.17	-0.42	0.32	-0.15	0.09	-0.16	1.00		
BQ	-0.09	-0.13	0.10	0.09	-0.45	-0.03	0.18	-0.51	-0.04	-0.12	-0.25	-0.38	1.00	
PR	-0.04	0.75	0.59	0.16	0.49	0.25	0.34	0.69	0.07	0.70	-0.35	0.39	-0.34	1.00

Table 4.4
Estimated Correlation Matrix of Variables **FDIS (Nominal)**

	FDI	GS	SC	IP	IC	EC	CRP	MIP	RT	LO	ET	DA	BQ	PR
FDI	1.00													
GS	-0.19	1.00												
SC	-0.10	0.50	1.00											
IP	0.05	0.37	0.40	1.00										
IC	0.11	0.06	-0.02	-0.01	1.00									
EC	0.15	0.13	0.14	0.24	0.02	1.00								
CRP	-0.70	0.35	0.43	-0.04	0.01	-0.41	1.00							
MIP	0.01	0.41	0.27	-0.30	0.13	0.31	0.05	1.00						
RT	-0.28	-0.24	-0.31	-0.84	0.21	-0.30	0.26	0.29	1.00					
LO	-0.20	0.62	0.75	0.48	0.31	0.16	0.46	0.21	-0.31	1.00				
ET	-0.32	0.27	0.03	0.33	0.60	-0.17	0.29	-0.13	0.06	0.32	1.00			
DA	0.73	0.17	0.08	0.03	0.34	0.17	-0.42	0.32	-0.15	0.09	-0.16	1.00		
BQ	-0.30	-0.13	0.09	0.09	-0.45	-0.03	0.18	-0.51	-0.04	-0.12	-0.25	-0.38	1.00	
PR	-0.11	0.75	0.59	0.16	0.49	0.25	0.34	0.69	0.07	0.70	-0.35	0.39	-0.34	1.00

Table 4.5

Estimated Correlation Matrix of Variables **FDI (Real)**

	FDI	GS	SC	IP	IC	EC	CRP	MIP	RT	LO	ET	DA	BQ	**PR**
FDI	1.00													
GS	-0.14	1.00												
SC	-0.14	0.50	1.00											
IP	0.03	0.37	0.40	1.00										
IC	0.17	0.06	-0.01	-0.01	1.00									
EC	0.20	0.13	0.14	0.24	0.02	1.00								
CRP	-0.53	0.35	0.43	-0.04	0.01	-0.41	1.00							
MIP	-0.07	0.41	0.27	-0.30	0.13	0.31	0.05	1.00						
RT	-0.23	-0.24	-0.31	-0.84	0.21	-0.30	0.26	0.29	1.00					
LO	-0.18	0.62	0.75	0.48	0.31	0.16	0.46	0.21	-0.31	1.00				
ET	-0.32	0.27	0.03	0.33	0.60	-0.17	0.29	-0.13	0.06	0.32	1.00			
DA	0.73	0.17	0.08	0.03	0.34	0.17	-0.42	0.32	-0.15	0.09	-0.16	1.00		
BQ	0.02	-0.13	0.09	0.09	-0.45	-0.03	0.18	-0.51	-0.04	-0.12	-0.25	-0.38	1.00	
PR	-0.30	0.75	0.59	0.16	0.49	0.25	0.34	0.69	0.07	0.70	-0.35	0.39	-0.34	1.00

Table 4.6

Estimated Correlation Matrix of Variables **FDI (Nominal)**

	FDI	GS	SC	IP	IC	EC	CRP	MIP	RT	LO	ET	DA	BQ	**PR**
FDI	1.00													
GS	-0.12	1.00												
SC	-0.14	0.50	1.00											
IP	0.10	0.37	0.40	1.00										
IC	0.11	0.06	-0.01	-0.01	1.00									
EC	0.34	0.13	0.14	0.24	0.02	1.00								
CRP	-0.68	0.35	0.43	-0.04	0.01	-0.41	1.00							
MIP	0.001	0.41	0.27	-0.30	0.13	0.31	0.05	1.00						
RT	-0.28	-0.24	-0.31	-0.84	0.21	-0.30	0.26	0.29	1.00					
LO	-0.22	0.62	0.75	0.48	0.31	0.16	0.46	0.21	-0.31	1.00				
ET	-0.31	0.27	0.03	0.33	0.60	-0.17	0.29	-0.13	0.06	0.32	1.00			
DA	0.72	0.17	0.08	0.03	0.34	0.17	-0.42	0.32	-0.15	0.09	-0.16	1.00		
BQ	-0.16	-0.13	0.09	0.09	-0.45	-0.03	0.18	-0.51	-0.04	-0.12	-0.25	-0.38	1.00	
PR	-0.05	0.75	0.59	0.16	0.49	0.25	0.34	0.69	0.07	0.70	-0.35	0.39	-0.34	1.00

4.10 A Comparison: PRI with ICRG PRI

The actual PR indices have been calculated with the help of ICRG methodology using the data on chronological events for Pakistan from 1970-2004. In this section, the PR indices are compared with ICRG PR indices. The record of ICRG indices available is from 1984-1997 and shown in chart-4.15. Since 1980, the evolving international business scene has pushed ICRG to make changes to the basic methodology for the calculation of risk indices. The risk indices originally calculated by ICRG were based on the old component system with thirteen basic components with equally divided weightings. The most recent changes occurred in 1997, when the total number of political risk components was reduced from 13 to 12 by increasing the weight of some of the other components[69].

A sequence of a similar risk index from 1984 to 1993 computed by the PRS group has only been available on the company web site[70]. A steep increase in the ICRG PR indices from 1993 gives an indication of the lower political risks in Pakistan. Our PR indices still showed a risk range of 40-50%, a moderate risk, throughout the years 1984-2003. The reasons in favour of these calculations can be elaborated as follows:

1: More reliable and detailed information has been made available for the political risk indices calculated in this research[71].

2: The steep decrease in the ICRG PR indices is due to changes in the structure of point assignments to individual components.

3: The aggregate risk indices have been calculated using the aggregation methodology explained in chapter 2 of ICRG PR Indexation Methodology, which makes the aggregate risk index a proper index with equally distributed values.

4: The detailed information gathered from the media and through self-experience has made for a more reliable weighting of the indices. The flat response can also be the habitual effect of the change of governments during 1970-1999. For example, during 1990-92 ICRG considered Pakistan at higher risk due to weak political government having less hold on provincial governments. However, it was considered less risky during 1994-1998 due to more powerful political government with a strong hold of the

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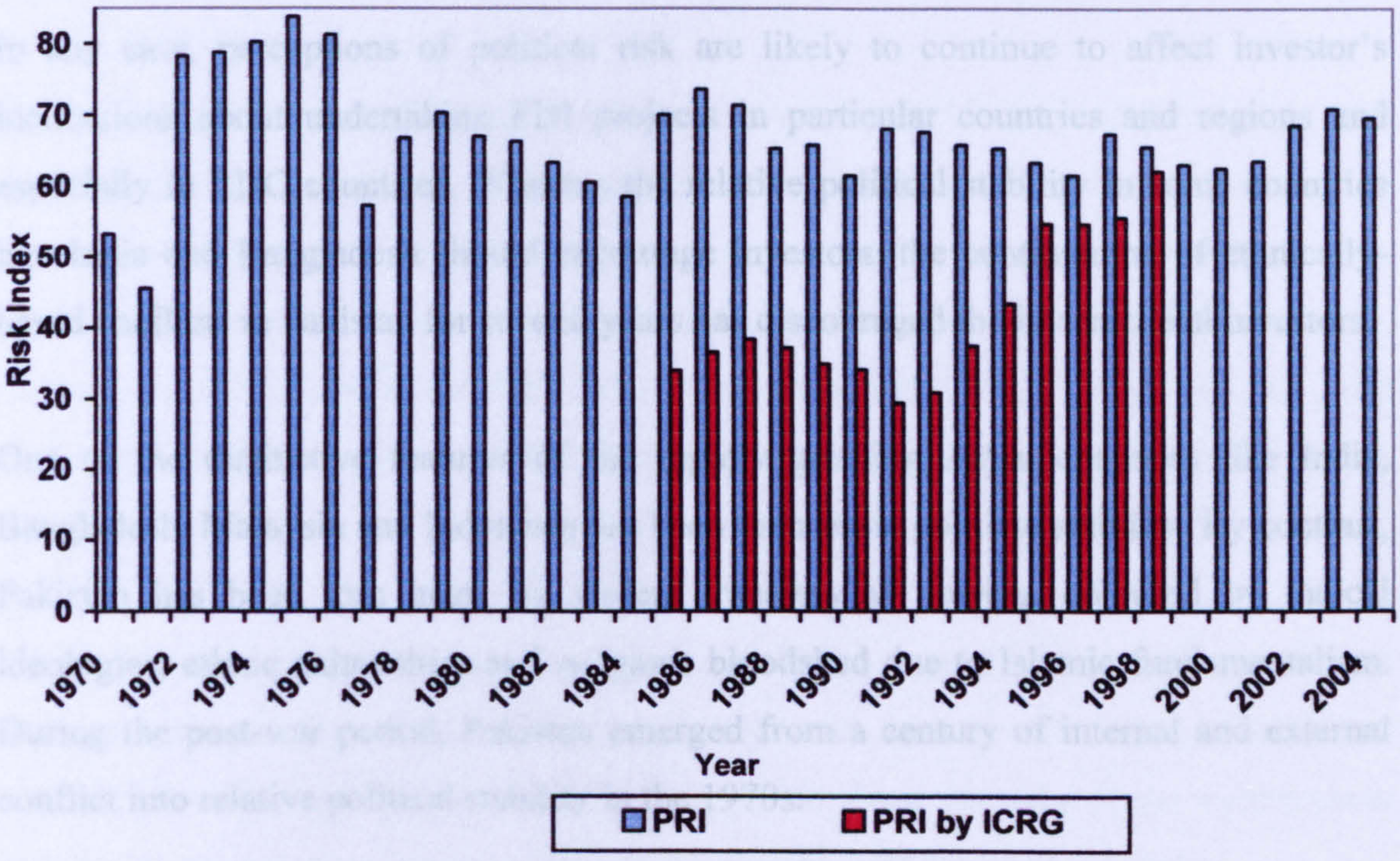
[69] The total number of political risk components was reduced from 13 to 12 by merging two old categories ("Political Violence" and "Civil War Threat") into the single category "Internal Conflict." Other changes include the replacement of "Economic Planning" in the old system by "Investment Profile," the replacement of "Party Development" from the old system by "Democratic Accountability," and a slight adjustment in the weighting of two components ("External Conflict" has been increased by two points and "Bureaucracy Quality" has been decreased by two points) (Curtsey PRS group Inc.)

[70] Only 12 years 1984-1997 were found free on the website as a sample

[71] For detail chronological events see Appendix-4.3

centre as well as the provinces. In this thesis, the risk index has been kept moderate for 1990-98 due to the similar government economic policies, despite the governments being weak and rather unstable. The denationalisation and privatisation policies were not affected by the majority or minority of different political governments.

Chart -4.14



4.11 Conclusion

To sum up, one can say that empirical studies on the relevance of country risk (CR) in general, and political risk (PR) in particular, for FDI is conclusive on the intuitive relationship between CR, PR and FDI with more specification of the nature, intensity and magnitude of this relationship. The relative empirical conclusiveness on the relevance of political risk for FDI is due to many factors associated with the different uses and definitions of political risk. Not only is the concept of political risk itself satisfactory, but the relationship between political instability measures and the multinational firm as a whole is fully understood (Brewer-1983). The same applies to the relationship between macro-economic variables due to the instability in policy and FDI flows to host countries.

Furthermore, the attribution of macro-economic variables, such as monetary politics and fiscal politics to economic variables, is also statistically significant since macro-economic variables used in most empirical studies are political-economic in nature. Fiscal and monetary policies are also political in the sense that they do not exclusively obey market forces but depend largely on political decisions in general and, for Pakistan in the period 1970 to 2004, on the decisions of the dictator.

In any case, perceptions of political risk are likely to continue to affect investor's inclinations about undertaking FDI projects in particular countries and regions and especially in LDC countries. Whereas the relative political stability in some countries like India and Bangladesh should encourage investors, the continuation of ethnically-based conflicts in Pakistan for several years has discouraged the international investors.

One of the distinctive features of the rapidly growing Asian countries like India, Bangladesh, Malaysia and Indonesia has been their basic political stability. By contrast, Pakistan has been torn apart by violent transfers of powers, coloured by radical ideologies, ethnic animosities and religious bloodshed due to Islamic fundamentalism. During the post-war period, Pakistan emerged from a century of internal and external conflict into relative political stability in the 1970s.

Furthermore, many of the uncertainties in the economic future of Pakistan lie precisely in this realm of political stability or risk. For instance, the regimes between 1970 and 1999 ended without a clear succession process and no one can predict the political future of the present government under a military general (199-2004) and in particular the post-dictatorship period; the consequences for investor confidence and their perceptions of risk are therefore unknown. Undoubtedly, political instability or stability has an influence on the perception of the risks by foreign investors in Pakistan. What remains to be demonstrated and assessed is the magnitude, the nature and the effects of the linkage between political risk and FDI. This demonstration is, however, because of the interrelation of psychological, politic, social, economic and cultural factors in the concept of political risk, very difficult to quantify.

When conducting the preliminary examination of the context of theoretical country risks in general and political risk in particular, it proved necessary to make an in-depth investigation into the existing theoretical background. The confusion of ideas as the key to understanding these ideas lies in the notion of risk or uncertainty. There is a fundamental distinction between the reward for taking a known risk and that for assuming a risk whose value itself is not known. It is so fundamental, indeed, that, as we shall see, a known risk will not lead to any reward or special payment at all.

One possible division of country risk is into economic risk, commercial risk, and political risk. Economic risk is risk related to the macroeconomic development of the country, such as the development in interest and exchange rates that may influence the profitability of an investment. Commercial risk is risk related to the specific investment, such as the risk related to the fulfilment of contracts with private companies and local partners. The third category, political risk, may in many countries be the most important one (Nordl-2001).

The rationale in prohibiting the receipt of any increase on the borrowed capital is to encourage the sharing of risk. In the Islamic economic system without the institution of interest, the lender of monetary capital is urged to share the risks of the entrepreneur and the investor is urged to undertake a joint venture with the opposite party.

An empirical analysis of the empirical relationship of the macro-economic variables such as GDP (real), real interest rate (Discount rate minus Inflation), the openness of the economy and the exchange rate with FDI flows in general and stocks in particular; along with the political risk index for Pakistan (1970-2004) will be presented in chapter 7.

Apendix-4.1

International Criteria of Country Risk Analysis[72]

Rating Methodology Profile	Selected Indicators
1:Intergovernmental Relations • Intergovernmental transfers • Authority of tax • Division of services responsibility • Borrowing regulations **2: Administrative System** • Legal limitations • Management system and control • Labour relations **3: Economic Structure & Growth** • Demographic Characteristics • Infrastructure • Natural resources endowments • Composition of output and employment • Growth performance and outlook **4: Fiscal Performance and Flexibility** • Expenditure structure and trends • Revenue composition and tax burden • Operating account balance • Capital spending and projections **5: Financial Position and Policies** • Accounting Practices • Liquidity management • Financing requirements and forecast • Debt Burden • Government owned enterprises and other contingent liabilities	**1: Demographic Indicator** • Population Growth • Population distribution by age category, incl those of working age and those 65 and older **2: Economic Indicators** • Per capita income • GDP growth • Investment patterns • Employment growth • Labour force participation rate • Unemployment rate **3: Financial Indicators** • Operating balance % operating Rev. • Overall balance % total revenue • Operating revenue growth • Inter Govt transfers % opt. revenue • Operating expenditure growth • Capital spending % total spending • Expenditure as percent of GDP • % of capital spending financed by non debt sources. **4: Debt Indicators** • Direct Debt % GDP • Direct Debt % Opt. Revenue • Total Local Govt Debt % GDP • Tax supported Debt % Opt. Revenue • Debt Services less interest earned % Opt. Revenue.

[72] Llewellyn, D. H. "The Handbook of Country and Political Risk Analysis"-1994 (p # 349 & 351)

Apendix-4.2

Pakistan Political Risk Indices (1970-2004)

1970-1976	1970	1971	1972	1973	1974	1975	1976
A) Government Stability (12)							
1: Ability to work	0	0	1	2	2	2	2
2: Ability to stay in office	0	0	1	2	2	2	1
3: Type of governance	0	1	1	1	1	1	1
4: Cohesion between parties	1	0	1	2	1	1	1
5: Command of legislature	0	0	1	2	1	1	2
6: Popularity of Government policies	0	0	0	1	2	2	1
Total	1	1	5	10	9	9	8
Section Result (ARP/TRP)*100	16.67	16.67	41.67	83.33	75.00	75.00	66.67
B) Socioeconomic Conditions(12)							
1: Public reaction on Government eco policies	0	0	2	2	2	1.5	1
2) Public facilities	1	1	1	1	1.5	1	1
3: Unemployment	1	1	1	1.5	1.5	1	1
4: Interest Rates rise / fall	2	1	1	2	1.5	2	1
5: Housing market	0	1	1	0	1	0	0
6: Infant mortality	1	1	1	1	1	1.5	1.5
Total	5	5	7	7.5	8.5	7	5.5
Section Result (ARP/TRP)*100	41.66	41.67	58.33	62.50	70.83	58.33	45.83
C) Investment Profile (12)							
1: Risk of expropriation or contract viability	0	0	0.5	0.5	0.5	1	1
2) Taxation	1	1	2	1.5	1.5	1.5	2
3: Repatriation	0	0	0.5	0.5	1	1.5	1.5
4: Labor cost	1	1	1	1.5	1.5	1	0.5
Total	2	2	4	4	4.5	5	5.5
Section Result (ARP/TRP)*100	16.67	16.67	33.33	33.33	37.50	41.67	45.83
D) Internal Conflict (12)							
1: Armed threats to Government or Business	0.5	0	2	1	1.5	2	2.5
2) Civil War (Govt. involvement in violence)	2	0.5	1	1.5	1	2	2.5
3: Political violence	1	0	2	1.5	1.5	1.5	1
4: Armed violence carried out all country	2	1	2	0.5	0.5	2	2
Total	5.5	1.5	7	4.5	5.5	7.5	8
Section Result (ARP/TRP)*100	45.83	12.5	58.33	37.5	45.83	62.5	66.67
E) External Conflict (12)							
1: Trade Restrictions & embargoes	2	2	2	1.5	1.5	1.5	1.5
2: Investment sanctions	2	0.5	1.5	0.5	1	1.5	1
3: Distortions in allocation of Eco resources	1	0.5	1	1	1.5	2	2
4: Violent change in structure of society	0.5	0.5	0.5	1	1.5	1.5	1
Total	5.5	3.5	5	4	5.5	6.5	5.5
Section Result (ARP/TRP)*100	45.83	29.17	41.67	33.33	45.83	54.17	45.83

Pakistan Political Risk Indices (1970-2004)

1970-76	1970	1971	1972	1973	1974	1975	1976
F) Corruption (6)							
1: Government stay in office	3	3	4	4	3.5	3	2.5
Total	3	3	4	4	3.5	3	2.5
Section Result (ARP/TRP)*100	50.00	50.00	66.67	66.67	58.33	50.00	41.67
G) Military in Politics (6)							
1: Involvement in Government	0	0	5.5	5	6	6	6
Total	0	0	5.5	5	6	6	6
Section Result (ARP/TRP)*100	0.00	0.00	91.67	83.33	100.00	100.00	100.00
H) Religious Tension (6)							
1: Govern. By single religious group	2	2	2	1.5	1.5	1.5	1.5
2: Suppression of religious freedom	2	2	2	1.5	1.5	2	2
3: Tension between different religious groups	1.5	1.5	1.5	1.5	1	1.5	1.5
Total	5.5	5.5	5.5	4.5	4	5	5
Section Result (ARP/TRP)*100	91.67	91.67	91.67	75.00	66.67	83.33	83.33
I) Law & Order (6)							
1: Impartial Legal system	0.5	0	0.5	1	0.75	0.5	0.5
2: Impartial Judicial system	0.5	0.5	0.5	1	0.75	0.75	0.5
3: Law ignored for political aim	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4: Strikes involving illegal practices	0.5	0	1.5	1	1	1	1
Total	2	1	3	3.5	3	2.75	2.5
Section Result (ARP/TRP)*100	33.33	16.67	50.00	58.33	50.00	45.83	41.67
J) Ethnic Tension (6)							
1: Racial	0.5	0.5	0.75	0.5	0.5	0.75	0.75
2: Nationality	0.5	0.5	0.75	0.75	1	1.5	1.5
3: Language tensions	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	1.5	1.5	2	1.75	2	2.75	2.75
Section Result (ARP/TRP)*100	25.00	25.00	33.33	29.17	33.33	45.83	45.83
K) Democratic Accountability (6)							
1: Implementation of Policies by a Government	0.5	1	2.5	3	2.5	2	3
Total	0.5	1	2.5	3	2.5	2	3
Section Result (ARP/TRP)*100	8.33	16.67	41.67	50.00	41.67	33.33	50.00
L) Bureaucracy Quality (4)							
1: Expertise in policy making	0.75	0.75	0.5	0.5	0.5	0.5	0.5
2: Ability to handle crises	0.75	0.5	0.5	0.5	0.5	0.5	0.5
3: Impartiality	0.25	0.25	0	0	0	0	0
4: Recruitment & Training mechanism	1	1	0.75	0.75	0.75	0.75	0.75
Total	2.75	2.5	1.75	1.75	1.75	1.75	1.75
Section Result (ARP/TRP)*100	68.75	62.5	43.75	43.75	43.75	43.75	43.75

Pakistan Political Risk Indices (1970-2004)

1976-83	1977	1978	1979	1980	1981	1982	1983
A) Government Stability (12)							
1: Ability to work	0	2	1.5	1.5	2	2	2
2: Ability to stay in office	0	1	2	2	2	2	2
3: Type of governance	1	0	1	1	1	1	1
4: Cohesion between parties	0	0	0	0.5	1	0	0.5
5: Command of legislature	1	0	0.5	0.5	0.5	0.5	1
6: Popularity of Government policies	0	1	1	1	1.5	1.5	1.5
Total	3	4	6	6.5	8	7	8
Section Result (ARP/TRP)*100	25.00	33.33	50.00	54.16	66.67	58.33	66.67
B) Socioeconomic Conditions(12)							
1: Public reaction on Government eco policies	1	1.5	2	1.5	1.5	1	0.5
2: Public facilities	1	1.5	1.5	1.5	1.5	1.5	1.5
3: Unemployment	0	0.5	0.5	0.5	0.5	0.5	0.5
4: Interest Rates rise / fall	1	1	1	0.5	0.5	0.5	0.5
5: Housing market	0	0.5	0.5	1	1	1	1
6: Infant mortality	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total	4.5	6.5	7	6.5	6.5	6	5.5
Section Result (ARP/TRP)*100	37.50	54.17	58.33	54.17	54.17	50.00	45.83
C) Investment Profile (12)							
1: Risk of expropriation or contract viability	0.5	1.5	2	2	1.5	1	0.5
2: Taxation	2	2	2.5	2.5	2.5	2.5	2.5
3: Repatriation	1.5	2	3	3	3	3	3
4: Labor cost	1	1	1	1	1	1	1
Total	5	6.5	8.5	8.5	8	7.5	7
Section Result (ARP/TRP)*100	41.67	54.16	70.83	70.83	66.67	62.50	58.33
D) Internal Conflict (12)							
1: Armed threats to Government or Business	1.5	2.5	2.5	2	1.5	1	0.5
2: Civil War (Govt. involvement in violence)	1	2	2	2	1.5	1	0.5
3: Political violence	0	2	2.5	1.5	1	1	0.25
4: Armed violence carried out all country	1	2.5	2.5	1.5	1	1	0.5
Total	3.5	9	9.5	7	5	4	1.75
Section Result (ARP/TRP)*100	29.17	75.00	79.17	58.33	41.67	33.33	14.58
E) External Conflict (12)							
1: Trade Restrictions & embargoes	0.5	0.5	1	1.5	1.5	1.5	1.5
2: Investment sanctions	1.5	1.5	1.5	1.5	2	2	2
3: Distortions in allocation of Eco resources	1.5	1	0.5	1	1.5	1.5	1.5
4: Violent change in structure of society	1	1.5	1.5	1	0.5	0.5	0.5
Total	4.5	4.5	4.5	5	5.5	5.5	5.5
Section Result (ARP/TRP)*100	37.50	37.50	37.50	41.67	45.83	45.83	45.83

Pakistan Political Risk Indices (1970-2004)

1977-83	1977	1978	1979	1980	1981	1982	1983
F) Corruption (6)							
1: Government stay in office	3	3.5	3.5	3	3	3	3
Total	3	3.5	3.5	3	3	3	3
Section Result (ARP/TRP)*100	50.00	58.33	58.33	50.00	50.00	50.00	50.00
G) Military in Politics (6)							
1: Involvement in Government directly or indirectly	3	0	0	0	0	1	1
Total	3	0	0	0	0	1	1
Section Result (ARP/TRP)*100	50.00	0.00	0.00	0.00	0.00	16.67	16.67
H) Religious Tension (6)							
1: Govern. By single religious group	1	1	1	1	1	1	1
2: Suppression of religious freedom	2	2	1.5	1.5	1.5	1	1.5
3: Tension between different religious groups	1.5	1	0.5	0.5	0.5	0.5	0.5
Total	4.5	4	3	3	3	2.5	3
Section Result (ARP/TRP)*100	75.00	66.67	50.00	50.00	50.00	41.67	50.00
I) Law & Order (6)							
1: Impartial Legal system	0.5	0.5	1	0.75	0.75	0.75	0.5
2: Impartial Judicial system	0.5	0.5	0.75	0.5	0.5	0.5	0.5
3: Law ignored for political aim	0	0.5	0.5	0.5	0.5	0.5	0.5
4: Strikes involving illegal practices	0.5	1.5	1.5	1	1	1	1
Total	1.5	3	3.25	2.75	2.75	2.75	2.5
Section Result (ARP/TRP)*100	25.00	50.00	54.16	45.83	45.83	45.83	41.67
J) Ethnic Tension (6)							
1: Racial	0.5	0.75	0.5	0.5	0.5	0.5	0.5
2: Nationality	1.5	2	2	2	1.5	1	1
3: Language tensions	0.25	0.75	0.5	0.5	0.5	0.5	0.5
Total	2.25	3.5	3	3	2.5	2	2
Section Result (ARP/TRP)*100	37.50	58.33	50.00	50.00	41.60	33.33	33.33
K) Democratic Accountability (6)							
1: Implementation of Policies by a Government	1.5	1.5	2	2	2	2	1.5
Total	1.5	1.5	2	2	2	2	1.5
Section Result (ARP/TRP)*100	25.00	25.00	33.33	33.33	33.33	33.33	25.00
L) Bureaucracy Quality (4)							
1: Expertise in policy making	0.5	0.5	0.5	0.5	0.75	0.75	0.75
2: Ability to handle crises	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3: Impartiality	0	0	0	0	0	0	0
4: Recruitment & Training mechanism	0.75	0.75	0.75	1	1	1	1
Total	1.75	1.75	1.75	2	2.25	2.25	2.25
Section Result (ARP/TRP)*100	43.75	43.75	43.75	50.00	56.25	56.25	56.25

Pakistan Political Risk Indices (1970-2004)

1984-90	1984	1985	1986	1987	1988	1989	1990
A) Government Stability (12)							
1: Ability to work	1.5	2	2	1.5	1	1	0.5
2: Ability to stay in office	1.5	2	2	1.5	1	1	0.5
3: Type of governance	1	1.5	1.5	1	0.5	1.5	0.5
4: Cohesion between parties	0.5	0.5	0.5	0.5	0.5	1	0.5
5: Command of legislature	1	1	1	0.5	0.5	0.5	0.5
6: Popularity of Government policies	1	1.5	1.5	1	0.5	0.5	0.5
Total	6.5	8.5	8.5	6	4	5.5	3
Section Result (ARP/TRP)*100	54.16	70.83	70.83	50.00	33.33	45.83	25.00
B) Socioeconomic Conditions(12)							
1: Public reaction on Govt eco policies	0.5	1.5	1.5	1.5	1.5	1.25	1
2: Public facilities	1.5	1.5	2	2	2	1.75	1
3: Unemployment	1	1	1.5	1.5	1.5	1	1
4: Interest Rates rise / fall	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5: Housing market	1.5	1.5	1.5	1.5	1.5	1	1
6: Infant mortality	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total	6.5	7.5	8.5	8.5	8.5	7	6
Section Result (ARP/TRP)*100	54.17	62.50	70.83	70.83	70.83	58.33	50.00
C) Investment Profile (12)							
1: Risk of expropriation or contract viability	2	2	2	2	2	1.5	1.25
2: Taxation	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3: Repatriation	3	3	3	3	3	2	2
4: Labor cost	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	8	8	8	8	8	6.5	6.25
Section Result (ARP/TRP)*100	66.67	66.67	66.67	66.67	66.67	54.17	52.08
D) Internal Conflict (12)							
1: Armed threats to Govt or Business	0.5	1	0.75	1	1	1	1.5
2: Civil War (Govt. involvement)	0.5	1	0.25	0.25	0.25	0.5	0.75
3: Political violence	0.25	1	0.5	1	1	1	1.5
4: Armed violence carried out all country	0.5	1.5	1	1	1	1	1.25
Total	1.75	4.5	2.5	3.25	3.25	3.5	5
Section Result (ARP/TRP)*100	14.58	37.50	20.83	27.08	27.08	29.17	41.67
E) External Conflict (12)							
1: Trade Restrictions & embargoes	1.5	2	2	2	2	2	2
2: Investment sanctions	2	2	2	2	2	2	2
3: Distortions in allocation of Eco resources	1	1	1	1	1.5	1.5	2
4: Violent change in structure of society	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	5	5.5	5.5	5.5	6	6	6.5
Section Result (ARP/TRP)*100	41.67	45.83	45.83	45.83	50.00	50.00	54.17

Pakistan Political Risk Indices (1970-2004)

1984-90	1984	1985	1986	1987	1988	1989	1990
F) Corruption (6)							
1: Government stay in office	3	3.5	3.5	3.5	3	2.5	2
Total	3	3.5	3.5	3.5	3	2.5	2
Section Result (ARP/TRP)*100	50.00	58.33	58.33	58.33	50.00	41.67	33.33
G) Military in Politics (6)							
1: Involvement in Government	1	2	3	3	1	3	4
Total	1	2	3	3	1	3	4
Section Result (ARP/TRP)*100	16.67	33.33	50.00	50.00	16.67	50.00	66.67
H) Religious Tension (6)							
1: Govern. By single religious group	1	1	1	1	1	1.5	1
2: Suppression of religious freedom	1	1.5	1.5	1.5	1.5	1.5	1.5
3: Tension between religious groups	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	2.5	3	3	3	3	3.5	3
Section Result (ARP/TRP)*100	41.67	50.00	50.00	50.00	50.00	58.33	50.00
I) Law & Order (6)							
1: Impartial Legal system	0.5	0.75	0.75	0.75	0.75	0.75	0.5
2: Impartial Judicial system	0.5	0.75	0.75	0.75	0.75	0.5	0.5
3: Law ignored for political aim	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4: Strikes involving illegal practices	1	1	1	1	1	1	1
Total	2.5	3	3	3	3	2.75	2.5
Section Result (ARP/TRP)*100	41.67	50.00	50.00	50.00	50.00	45.83	41.67
J) Ethnic Tension (6)							
1: Racial	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2: Nationality	1	0.75	1	0.75	1	1	0.75
3: Language tensions	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	2	1.75	2	1.75	2	2	1.75
Section Result (ARP/TRP)*100	33.33	29.17	33.33	29.17	33.33	33.33	29.17
K) Democratic Accountability (6							
1: Implementation of Government Policies	1	1	2	2	2	1.5	1.5
Total	1	1	2	2	2	1.5	1.5
Section Result (ARP/TRP)*100	16.67	16.67	33.33	33.33	33.33	25.00	25.00
L) Bureaucracy Quality (4)							
1: Expertise in policy making	0.75	0.75	0.75	0.75	0.75	0.75	0.5
2: Ability to handle crises	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3: Impartiality	0	0.25	0.25	0.25	0.25	0.25	0
4: Recruitment & Training mechanism	1	1	1	1	1	0.75	0.75
Total	2.25	2.5	2.5	2.5	2.5	2.25	1.75
Section Result (ARP/TRP)*100	56.25	62.5	62.5	62.5	62.5	56.25	43.75

Pakistan Political Risk Indices (1970-2004)

1991-97	1991	1992	1993	1994	1995	1996	1997
A) Government Stability (12)							
1: Ability to work	1	1	1	0.75	0.75	0.75	1
2: Ability to stay in office	1	1	1.25	0.75	0.75	0.5	1.25
3: Type of governance	1.25	1.25	1	1.25	1.25	1	1
4: Cohesion between parties	0.5	0.5	0	0.5	0.5	0.25	0.25
5: Command of legislature	1	1	0.75	0.75	0.75	0.5	0.75
6: Popularity of Government policies	1	1	1.25	1	1	0.75	1.25
Total	5.75	5.75	5.25	5	5	3.75	5.5
Section Result (ARP/TRP)*100	47.92	47.92	43.75	41.67	41.67	31.25	45.83
B) Socioeconomic Conditions(12)							
1: Public reaction on Government eco policies	1.25	1	1	1	1	0.75	1
2: Public facilities	1.25	1.25	1.25	1.25	1	1	1
3: Unemployment	1	1	1.25	1	0.75	0.75	0.75
4: Interest Rates rise / fall	0.75	0.75	0.75	0.75	0.75	0.75	1
5: Housing market	1	1	1	1	1	1	1
6: Infant mortality	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Total	6.75	6.5	6.75	6.5	6	5.75	6.5
Section Result (ARP/TRP)*100	56.25	54.17	56.25	54.17	50.00	47.92	54.17
C) Investment Profile (12)							
1: Risk of expropriation or contract viability	1.25	1	1	1.25	1.25	1.25	1
2: Taxation	2.5	2.5	2.5	2.5	2.5	2.5	2.5
3: Repatriation	2	2	2	2	2	2	2
4: Labor cost	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	6.25	6	6	6.25	6.25	6.25	6
Section Result (ARP/TRP)*100	52.08	50.00	50.00	52.08	52.08	52.08	50.00
D) Internal Conflict (12)							
1: Armed threats to Government or Business	1.5	1.5	1.5	1.25	1.25	1.25	1.5
2: Civil War (Govt. involvement in violence)	0.75	0.75	0.75	0.75	0.75	0.75	1
3: Political violence	1.5	1.5	1.5	1.5	1.5	1.5	1.5
4: Armed violence carried out all country	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Total	5	5	5	4.75	4.75	4.75	5.25
Section Result (ARP/TRP)*100	41.67	41.67	41.67	39.58	39.58	39.58	43.75
E) External Conflict (12)							
1: Trade Restrictions & embargoes	2	2	2.5	2.5	2.5	2.5	2.5
2: Investment sanctions	2	2	2	2	2	2	2
3: Distortions in allocation of Eco resources	2	1	1	1	1	1	1
4: Violent change in structure of society	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	6.5	5.5	6	6	6	6	6
Section Result (ARP/TRP)*100	54.17	45.83	50.00	50.00	50.00	50.00	50.00

Pakistan Political Risk Indices (1970-2004)

1991-97	1991	1992	1993	1994	1995	1996	1997
F) Corruption (6)							
1: Government stay in office	3	3	2.5	2.25	2.25	2	2.5
Total	3	3	2.5	2.25	2.25	2	2.5
Section Result (ARP/TRP)*100	50.00	50.00	41.67	37.5	37.5	33.33	41.67
G) Military in Politics (6)							
1: Involvement in Government	4	4	3	2.5	2.5	2.5	3
Total	4	4	3	2.5	2.5	2.5	3
Section Result (ARP/TRP)*100	66.67	66.67	50.00	41.67	41.67	41.67	50.00
H) Religious Tension (6)							
1: Govern. By single religious group	1	1	1	1.5	1.5	1.5	1.5
2: Suppression of religious freedom	1.5	1.5	1.5	1.5	1.5	1.5	1.5
3: Tension between religious groups	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	3	3	3	3.5	3.5	3.5	3.5
Section Result (ARP/TRP)*100	50.00	50.00	50.00	58.33	58.33	58.33	58.33
I) Law & Order (6)							
1: Impartial Legal system	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2: Impartial Judicial system	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3: Law ignored for political aim	0.5	0.5	0.5	0.5	0.5	0.5	0.5
4: Strikes involving illegal practices	1	1	1	1	1	1	1
Total	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Section Result (ARP/TRP)*100	41.67	41.67	41.67	41.67	41.67	41.67	41.67
J) Ethnic Tension (6)							
1: Racial	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2: Nationality	0.75	0.75	0.75	0.75	0.75	0.75	0.75
3: Language tensions	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Section Result (ARP/TRP)*100	29.17	29.17	29.17	29.17	29.17	29.17	29.17
K) Democratic Accountability (6)							
1: Implementation of Government Policies	2	2.5	3	2.5	2.5	3	3.5
Total	2	2.5	3	2.5	2.5	3	3.5
Section Result (ARP/TRP)*100	33.33	41.67	50.00	41.67	41.67	50.00	58.33
L) Bureaucracy Quality (4)							
1: Expertise in policy making	0.5	0.5	0.5	0.5	0.5	0.5	0.5
2: Ability to handle crises	0.5	0.5	0.5	0.5	0.5	0.5	0.5
3: Impartiality	0	0	0	0.5	0	0	0
4: Recruitment & Training mechanism	0.75	0.75	0.75	0.75	0.75	0.5	0.5
Total	1.75	1.75	1.75	2.25	1.75	1.5	1.5
Section Result (ARP/TRP)*100	43.75	43.75	43.75	56.25	43.75	37.50	37.50

Pakistan Political Risk Indices (1970-2004)

1998-2004	1998	1999	2000	2001	2002	2003	2004
A) Government Stability (12)							
1: Ability to work	1	1.25	1	1	1.25	1.5	1.75
2: Ability to stay in office	1.25	1.5	1.5	1.5	1.5	1.75	1.75
3: Type of governance	0.75	0.5	0.25	0.25	0.75	1	1.00
4: Cohesion between parties	0.5	0.5	0.25	0.25	0.5	0.75	1.00
5: Command of legislature	0.5	0.5	0	0.25	0.5	0.75	0.75
6: Popularity of Government policies	1.25	1.5	0.5	0.5	0.5	0.5	0.50
Total	5.25	5.75	3.5	3.75	5	6.25	6.75
Section Result (ARP/TRP)*100	43.75	47.92	29.17	31.25	41.67	52.08	56.25
B) Socioeconomic Conditions(12)							
1: Public reaction on Government eco policies	1.25	1.25	1.25	1	1	1	1.00
2: Public facilities	1.25	1.25	1.25	1	1.25	1.25	1.00
3: Unemployment	1	1	1	0.75	0.75	0.75	0.75
4: Interest Rates rise / fall	1	1	1	1	1	1	1
5: Housing market	1	1	1	1	1	1	1.25
6: Infant mortality	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Total	6.75	6.75	6.75	6	6.25	6.25	6.25
Section Result (ARP/TRP)*100	56.25	56.25	56.25	50.00	52.08	52.08	52.08
C) Investment Profile (12)							
1: Risk of expropriation or contract viability	1	1.25	1.25	1.25	1.00	1.00	1.25
2: Taxation	2.5	2.5	2.5	2.5	2.5	2.5	2.75
3: Repatriation	2	2	2	2	2	2	2.25
4: Labor cost	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	6	6.25	6.25	6.25	6	6	6.75
Section Result (ARP/TRP)*100	50.00	52.08	52.08	52.08	50.00	50.00	56.25
D) Internal Conflict (12)							
1: Armed threats to Government or Business	1.5	1.5	1.75	1.75	1.75	1.75	1.75
2: Civil War (Govt. involvement)	1	1	1	1	1	1	0.75
3: Political violence	1.5	1.5	1.75	1.75	1.75	1.75	2.00
4: Armed violence carried out all country	1.25	1.25	1.5	1.5	1.5	1.5	1.75
Total	5.25	5.25	6	6	6	6	6.25
Section Result (ARP/TRP)*100	43.75	43.75	50.00	50.00	50.00	50.00	52.08
E) External Conflict (12)							
1: Trade Restrictions & embargoes	2	2	2	2.25	2.5	2.5	2.00
2: Investment sanctions	1.5	1.5	1.5	1.75	2	2	1.75
3: Distortions in allocation of Eco resources	0.75	0.75	0.75	0.75	1	1	1.00
4: Violent change in structure of society	0.5	0.5	0.5	0.5	0.5	0.5	0.75
Total	4.75	4.75	4.75	5.25	6	6	5.50
Section Result (ARP/TRP)*100	39.58	39.58	39.58	43.75	50.00	50.00	45.83

Pakistan Political Risk Indices (1970-2004)

1998-2004	1998	1999	2000	2001	2002	2003	2004
F) Corruption (6)							
1: Government stay in office	2.25	2.25	2.5	2.5	2.5	2.5	2.00
Total	2.25	2.25	2.5	2.5	2.5	2.5	2.00
Section Result (ARP/TRP)*100	37.5	37.5	41.67	41.67	41.67	41.67	33.33
G) Military in Politics (6)							
1: Involvement in Government	3.5	2.5	1	1	2.5	2.5	2.5
Total	3.5	2.5	1	1	2.5	2.5	2.5
Section Result (ARP/TRP)*100	58.33	41.67	16.67	16.67	41.67	41.67	41.67
H) Religious Tension (6)							
1: Govern. By single religious group	1.5	1.5	1.5	1.5	1.5	1.5	1.25
2: Suppression of religious freedom	1	1	1.5	1.5	1	1.5	1.75
3: Tension between religious groups	0.5	0.5	0.5	0.5	0.5	0.5	0.25
Total	3	3	3.5	3.5	3	3.5	3.25
Section Result (ARP/TRP)*100	50.00	50.00	58.33	58.33	50.00	58.33	54.16
I) Law & Order (6)							
1: Impartial Legal system	0.5	0.5	0.5	0.5	0.5	0.5	0.25
2: Impartial Judicial system	0.5	0.5	0.5	0.5	0.5	0.5	0.25
3: Law ignored for political aim	0.5	0.5	0.5	0.5	0.5	0.5	0.25
4: Strikes involving illegal practices	1	1	1	1	1	1	0.75
Total	2.5	2.5	2.5	2.5	2.5	2.5	2
Section Result (ARP/TRP)*100	41.67	41.67	41.67	41.67	41.67	41.67	33.33
J) Ethnic Tension (6)							
1: Racial	0.5	0.5	0.5	0.5	0.5	0.5	0.75
2: Nationality	0.75	0.75	0.75	0.75	0.75	0.75	0.75
3: Language tensions	0.5	0.5	0.5	0.5	0.5	0.5	0.50
Total	1.75	1.75	1.75	1.75	1.75	1.75	2
Section Result (ARP/TRP)*100	29.17	29.17	29.17	29.17	29.17	29.17	33.33
K) Democratic Accountability (6)							
1: Implementation of Government Policies	3.5	2.5	3	3.5	4	4	4.25
Total	3.5	2.5	3	3.5	4	4	4.25
Section Result (ARP/TRP)*100	58.33	41.67	50.00	58.33	66.67	66.67	70.80
L) Bureaucracy Quality (4)							
1: Expertise in policy making	0.5	0.5	0.75	0.75	0.75	0.75	1.00
2: Ability to handle crises	0.5	0.5	0.75	0.75	0.75	0.75	0.50
3: Impartiality	0	0	0	0	0	0	0
4: Recruitment & Training mechanism	0.5	0.75	0.75	0.75	0.75	0.75	0.50
Total	1.5	1.75	2.25	2.25	2.25	2.25	2
Section Result (ARP/TRP)*100	37.50	43.75	56.25	56.25	56.25	56.25	50.00

Appendix-4.3

Pakistan Political Risk: Qualitative Information (1970-2004)

A 1970- The nine-month civil war in East Pakistan (Bangladesh) had demoralized the armed for
1971- The defeat of Pakistan in Eat Pakistan war Yahya Khan resigned in 1971.
1972-Power handed over to People's Party and Z.A. Bhutto took office as Prime Minister
1972-77 -Pakistan People's Party (PPP) government, stable but got week with time duration.
1977- General election in country again destabilised a strong majority holding government.
1978- Military take over after long unrest in general public and week law and order.
1978- Zia being a military general declared himself as President of Pakistan
1980-Provisional Constitutional Order (PCO), for details see
Noman, O-1985, " Political Economy of Pakistan" ch # 1, part-3, p # 120-125
1982-Political violence by opposition parties coalition MRD
1983-Induction of Civilian ministers to Government
1984-Announcement of general elections to be held in 1985
1984- Law & Order situation in Karachi had shaken the Government ability
1985- General elections held to established a coalition government under Army control
1988- Dismissal of Democratic Government by Army General
as President using B-52 constitution-1973
1988- Plane crash killed the President & others destabilizing the whole system
1988- New interim govt formed to hold party based election in 1988
1988- Party based elections held and anti Zia policies party coalition govt formed
1990-Democratic Govt dismissed by President and fresh election held
1990-New govt formed, which was considered a pro Zia policies
1993- Major alley JI quit IJI coalition for not backing JI favourite Afghan leaders
1993- New coalition formed headed by PPP as no party got open majority
Ref: "People's Verdict", News line Oct-1993, and Dawn 8 Oct-1993.
1996- PPP govt dismissed by President using 58-2(B) despite being a PPP leader
1997- PML (N) won by clear majority to form govt at National + 03 provinces
and a coalition govt in Pakistan Peoples Party majority in Sind province
Ref: Hussin, Z- Feb-1997 "Clean Sweep", News line Feb-1997, p # 36 5 Feb-1997.
and " Latest Party position" Dawn
1997- Jamat Islami and Jamiat Ulma Pakistan boycotted the election
1998-National assembly approved 13th amendment to empower Prime Minister.
1998- First row of clashes started with President and Chief Justice of Pakistan,
ended by resignation by president and removal of Chief Justice from office
1999- 2nd conflict with Army Chief, which ended with forceful Military rule
2000- Military government headed by Army Chief, suspended constitution
2000- Provisional Constitution Order (PCO) # 1-1999 approved by Supreme Court
2000- General Musharraf held the office of Chief Executive of country
2001- General Musharraf became president after dismissing an elected president
2001- Local bodies non-party based elections held to check parties street power

2001- After 11/09 terrorist attacks in US, Military government decided to ally US
2002-General elections held under Legal Framework Order (LFO)
"an amendment in 1973-constituion,which legally protected military dictatorship"
2003- LFO passed by assembly, a dictator got powers to dissolve assembly

B 1977-1985 The increase in population shows better economic conditions.
See Burki-1991, " Pakistan under Military", ch-4, p-87
1978-Main attributes of Fifth Five Year Plan for Private sector confidence
in security, which also helped Government with economic growth
1983- Main attributes of the Sixth Five Year Plan (1983-1988)
Redistribution, Poverty alleviation, & Social Justice.
1986-New political govt social action program under sixth five year plan
1988- Political Govt dismissed and Zia died in plane crash
1989-Benazir sworn in as Prime Minister of Pakistan but no change in policies
1990- Benazir government dismissed on mishandling on economy and corruption
1990-Nawaz Sharif sworn in as a new Prime Minister after elections October-1990
1992-Kashmir floods killed 2,000, government blamed for mishandling the crises
1990- First speech by PM since elections-1990 with special slogan of genuine
journey to poverty reduction, Ref: Dawn, 9th November-1990
1993- Samad, A. "Economic Policies of Nawaz Sharif 1st term 1990-93"
1993-1996 Despite PPP government 2nd term in office,
Unemployment increased from 4.7% in 1993 to 5.4% in 1996
1995- Budget June -1995 with low taxes but a mini budget in Oct-1995
1995 - 7% devaluation of Rupee to boost exports raised dissatisfaction in public
1997- Nawaz Sharif 2nd term as Prime minister faced many social and economic
challenges like increased unemployment , external debt, corruption etc.
1998- Slight decrease in unemployment rate from 6.09% in 1997 to 5.90% in 1998
1998- Infant mortality decreased from 90/1000 in 1991 to 84/1000 in 1998
1998- The decreasing trends in unemployment and infant mortality revealed better
implementation and management of economic and social policies
1999 The trends remained same despite the change in government
2000- Unemployment increased from 5.90% in 1999 to 7.80% in 2000
2001-2003 public dissatisfaction over the handling of economic situation

C See Foreign Private Investment (Promotion and Protection) Act, 1976, BOI Pak,
Annexure-XV, and also see "Political Economy of Pakistan-1988" p # 77
1973-1975 Labour wages increase
1988-1992 the economic investment policies remained unchanged despite
frequent changes in governments
1992- Economic Act to facilitate foreign investors,
for further details see "http://www.pakboi.gov.pk/html/annexure_xvi_.html
July-1992 Labour wages were fixed as lowest to 1,500/- pm.
1990-1992 investment policies to gain international investors confidence
1994- $ 4billions FDI in energy sector, shows either international investors

confidence or a political corruption in contract
1995-96 Rs. 40.8 billion taxes imposed to cover the debt and defence budget
1996- The change in government created an atmosphere of political instability risk
1998- Freezing of foreign current accounts created risk of repatriation of profits
1999- The Military dictatorship in the country created a risk contract viability
2001- 11/09 attacks in USA, increased the security risk particularly in Pakistan
2002-03 The restoration of semi political government and Pakistan commitment to fight terrorism gained foreign investors confidence on security risk
2002-03 2 6% growth in FDI inflows show foreign investors confidence

D 1970-Fair & Impartial Elections by Government after long Military dictatorship
1971-postponment of Assembly session & Delay in power transfer to Mujeeb.
1973-Armed violence in Baluchistan Province & Military action in the province
1974-Religious violence and Qadianis were declared Non-Muslims
1977- General Elections & Political parties agitation against rigging in Election
1977-Military intervention to control threat of civil war between FSF & public
1979- Islamic Panel Code introduced,
1979- Threats of violence as Bhutto hanged on 4th April-1979
1980 Shia Muslims convention in capital Islamabad later turned into violence against Islamic Tax (Zakat), killed 01 person
1981- Bomb explosion at Karachi Stadium just before arrival of Pop John Paul II
1981-PIA plane hijacked by Al-Zulfikar Terrorist Organisation
1981- Indian magazine India Today reported of infiltration of thousands of Afghan based guerrillas for armed violence in Pakistan
1982- 25,000 teachers demonstration for pay rise turned into political violence later and with clash in police injured 15 and wounded 100.
1982- Political leader detention extended for unlimited period for violence
1983- Religious and political violence in public and governmentt
1983- Religious tension among groups
1983-1984 On violence see Burki-1991, "Pakistan Under the Military", # 167-172
1985- General elections held to restore democratic institutions
1985- President called off martial law & allowed political parties activities
1986- Benazir returned home and started agitation against Government
1986- Clashes between Pathans & Muhajirs in Karachi after an action by govt against drugs dealers Sohrab Goth Karachi killing 147 people
1987- bomb blast in Karachi killed 22, uprise in civil war, Afghan refugees blamed
1987- Muhajir Qaumi Mahaz leader arrested for political violence and armed threat
1988-Army ammunitions Ojhri camp exploded killing 100's, fears of terrorist activity
1988- A prominent shi'a scholar assassinated in Peshawar (Frontier province)
1989-Banazir government dismissed by President using B-52 of constitution due to Failure in working relationship with opposition in 02 provincial governments.
1990- Nawaz Sharif entered to the office as Prime Minister of Pakistan
but still was not able to control armed violence in the country

1993- Conflict with President on 8th amendment in constitution, giving powers to President of Pakistan
1993- Armed conflicts among the political groups created a law & order instability
1993- Benazir reached from London and started attacking the govt for creating anarchy situation and tried to settle his dispute with his rival President to grab power
1993- President of Pakistan dismissed Prime Minister Nawaz Sharif government
1993- Nawaz government reinstated by Supreme Court
1994-1995 Armed violence in Karachi claimed 500 included Sind Chief Minister brother
1995- Rs 120 billions of Market capitalisation were wiped off from Karachi Stock Exchange, Ref: News line, March-1995, p # 95
1995- It was estimated a loss of Rs. 01 billion revenue for 01 day strike in Karachi
1996- A political agitation was started due the huge increase of taxes in the budget
1997- Lahore bomb blast claiming 19 lives raised religious tension in the country
1998- Reduction in armed violence was observed due to elected governments representing four provinces and law and order enforcement helped by Army
1999-2003 The armed violence in country reduced due to military government

E 1971- Democratic government formed headed by Mr. Bhutto (1970-1977)
1972- Shimla agreement between India & Pakistan
1972- Credit Policy restructuring by State Bank
1972- Nationalization of major industries started to end monopoly in business
1972- 80% devaluation of Pak currency and highest inflation at 6.6%
1973-change in oil prices effected the economy
1977- General Elections, Political parties agitation against rigging in Election Military called to restore peace
1977-peaceful change of regime , military take over
1979- Introduction of Islamic Tax system increased uncertainty, the savings fell which compelled government to raise borrowing
1979- Military & Economic sanctions lifted due to Russian invasion in Afghanistan
1979- Record 7.3% GDP growth helped in better economy
1980- IMF approved $ 1.7 billion loan for Pakistan to assist stabilization of economy
1980-US government announced $ 3 billion 3 years aid package for Pakistan
1980- US State department lifted ban on military & economic aid to Pakistan
1981-Reagon Administration approved $ 275 million military aid to Pakistan
1982-US senate foreign committee approved $ 500 million for Pakistan
1984- Drop in foreign capital inflows by 20% from target due to regional tension
1985- New development programme by elected democratic government
1986- A fair drop in FDI due Nuclear development uncertainty
1986- Despite nuclear capability allegations, US government continued aid program due to strategic importance of Pakistan
1988- National Economic Council approved the 7th Five Year Plan (1988-1993)
1988- After successful completion of 1st 6 years plan, US government approved $ 4.02 billion plus 57% (i.e. $ 2.28 billion) for economic & military assistance

1990- Started social reform program through privatisation, decentralization
& Deregulation of the nationalised industries during 1971
1992- Floods damaged cotton crops which effected the social reform program
1993- Floods in country severely damaged the crops and effected the textile exports
1994- President Clinton imposed sanctions on Pakistan using 1994
Non-proliferation law, which also pinched India by $ 20 billion in aid.
1994-96 Border conflicts with India damaged the economy and relations with US
1996- US government released a military and economic aid package of
$ 350 million due to Brown amendment
1998- The nuclear tests set back the economic reforms due to subsequent
economic sanctions by G-7 countries
1999- The developed countries put sanctions on aid programs due to military rule
1999- Pakistan survived a default risk by the rescheduling loans from IMF, Paris club
2000-2003 Pakistan made a significant move to macroeconomic reforms

F 1977-1988 Long military rule in the country for 11 years
1977-1988 Long military rule in the country for 11 years
1989- PPP government considered more corrupt than 1st term from 1971-1977
1990- PPP govt dismissed by President with corruption charges
1991- General elections held but the credibility of elections was questioned
1993- Nawaz government was accused of mishandling public fund
due to bankruptcy of 2 investment corporations owned by his cabinet members
1993- The government accused of money laundering through Foreign
Investment Bonds, without identity and money source of investor identification
1996- PPP government dismissed by President due to mishandling of economy,
judiciary, long term problems in narrow based taxing system.
1996- Pakistan ranked 2nd most corrupt country, Transparency International's
report-1996, Ref: Far Eastern Economic Review 159, no 26 (27 June, 1996), p 66
1998- Pakistan Muslim League government ministers accused of taking out millions
of $s from their accounts 01 night before freezing of FOREX accounts
1999-2003 The military led democratic govt included 75% of cabinet members
accused by National Accountability Beau rue (NAB) of being defaulters.
Ref: NAB reports before election-2002

G 1972- Military backed elected govt of Bhutto
1973- Military action in Baluchistan against guerrillas
1982- 350 members Majlios-e-Shura formed to strengthen Military government
1985- Election held under Military regime to move a step forward to democracy
1986- Martial Law lifted from country & army returned to barracks
1988- National assembly dissolved by President using B-52 clause of constitution,
to hold fresh elections in 1989 under a care taker government under military
1988- President Zia died in plan crash & new general elections held in 1989
1989- Party based elections held, new government considered to be anti Military
1993- Military directly involved in resignation of Prime minister and President

1993-Fresh general elections held under Army supervision
1996- The president dissolve Pakistan Peoples Party government considered to less loyal to Pakistan and was backed by army
1999- 2001 Military again toppled the elected govt and suspended the constitution
2002-2003 Military dictator captured the Presidency and became 3rd Military uniformed President of Pakistan after election-2002

H 1973-Islamic contents of constitution
1974- Tension between Qadianis and Muslims
1974-Qadianis declared non-Muslims
1977- Military rule headed by Zia-ul-Haq a strict Sunni Muslim
1978- Tension between Sunni & Shia public started growing
1979- Iran Islamic Inqalab effected religious understanding in Pakistan
1980- Shi's convention in Islamabad against Islamic tax (Zakat),
1980- Tension increased among Sunni group and Shi's group due to conflicts on the implementation of Islamic Taxation laws (Zakat)
1981-Shi's formed Tehrik Nefaz-e-Fiqh Jafari (TNFJ), the Sunni's formed Sunni Tehrik to pressurise the government for the implementation of their beliefs
1981- Three Sunni Ulemas were appointed as high court judges 1st time in Pakistan
1983- Shi's Muslims were given exemption from paying Zakat & Usher
1984- Ahmedi's already declared as non-Muslims were ordered not to call themselves Muslims and their worship place as Masjid in ordinance 298-B, 298-C in Pakistan Panel Code, see Talbot-1998,"Pakistan a Modern History"Ch-9,pp-283 Also see, Burki-1991,"Pakistan under Military",ch-6, pp-170
1989- Benazir (PPP) considered to be Shia as her mother came from Iran
1990-1993 Again IJI government more religious in general but Sunni in particular
1993- Nawaz govt refused to help in Shia beliefs restriction through Shariat bill
1994- Manzoor Masih gunned down due his remarks against Prophet (mpbuh)
1993-1996 PPP government was broad based as compared to IJI during1990-1993.
1996-1999 Pakistan Muslim League government replacing Pakistan Peoples Party also remained broad based but still under the fundamentalist elements of Army
1999-2003 The take over by army was basically helped by religious group in army but later on it became a broad based govt.

I 1970- Free & Fair general elections announced & held in Dec-1970
1971- Pakistan National assembly session March-1971 postponed due to political violence in East wing of Pakistan.
1973- Constitution passed fm National Assembly
1973- Baluchistan provincial Govt dismissed
1974 creation of FSF, a Para military force to take place of Army
1977-General election under government, blamed of impartial & rigged elections
1977- Military take over, the constitution, judicial, legal, political system paralysed
1977-1979 political activities banned due to martial law
1980-Provisional Constitution Order (PCO) under President order-1 to curb judges

1980- Chief Justice Lahore High Court retired due to court decision on the legality of military rule
1980- The arrested journalist sentenced by military, trade union activities banned
1981- Chief Justice along with 08 other senior judges were dismissed for not taking oath under Provisional Constitution Order (PCO)
1983- The judiciary and press had been marginalized by military government to have strong hold of power
1983- About 4,000 lawyers staged an anti govt protest against PCO
1984- Zia ul Haq announced a referendum to extend his presidency tenure
1984- Martial law lifted after general election but still PCO remained effective
1985- Less than a week after polls Zia announced another presidential order, which gave tremendous powers in the hands of President
1985-1988 Article 48 empowered the president to dissolve National assembly, appoint chiefs of forces, chiefs of supreme & high courts
1989- New government could not amend the constitution 8th amendment due simple majority so the powers remained in the hands of pro Zia president
1989- Additional judges in courts with political background and affiliation
1989-1992 Political appointments in the law enforcing agencies and bureaucracy
1993-Islami Jumhoori Ittehad (IJI) government was dismissed by the president for attempting to amend the constitution to reduce President's powers
1994- New PPP government used their powers to pinch their political rivals
1995- Asif Ali Zaradari, PM's husband used every method of trading to gain vote
Ref: Zahid Hussain, Benazir Bhutto:The fall from Grace,Newsline-Nov-1996, 24-31
1996- Defence & National Security Council (CDNS) dominate the law & rule
1996-1999 New government amended the constitution to reduce President powers
1997- A controversial Anti-terrorist law was imposed despite International condemnation
1998- A conflict between Chief Justice of Pakistan and Prime Minister ended with the resignation of Chief Justice and President
1999- A conflict with Army Chief, military take over and martial law imposed
1999-2002 constitution suspended and an LFO was introduced for interim period to take oath by Judiciary under LFO-99
2003- LFO amendment passed by assembly and a dictator got powers to dissolve assembly and formation of Council of Defence & National Security (CDNS)

J 1970-Uprise in ethnic tension in the Eastern wing of Pakistan
1971- Despite fair & impartial elections the tension remained
1972- Despite political Govt, the tension grew due to removal of 1300 civil servants from central govt in general but from Sind in particular
1973-Removal of Baluchistan govt raised ethnic tension between provinces
1980- Bhutto death sentence by Supreme court bench considered to be a racial decision as Punjabi judges in favour of decision and non Punjabis against
1981-Induction of more military generals to power created an atmosphere of Punjabi domination in the government (as all generals were from Punjab)

1982- Military also captured 43% 0f foreign services as ambassadors
1983- MRD national movement against military regime turned into violent regional struggle, Sind was mainly affected by political victimisation
1984- Sindhis and non-Sindhis conflict claimed 100s of lives in Karachi only
1985-1988 Tension decreased as the new prime minister of Pakistan is also Sindhi but the tension in Karachi remained highly risky
1986- The ethnic tension among Pathans and Muhajirs in Karachi claimed 174 lives pushing the Government to impose curfew
1987- After a few months normalcy, ethnic tension again grew in Sind
1987- Bomb blast in Bori Bazar Karachi killed 72 giving rise to tension among rise Pathans and Muhajirs
1987- Troops called to control ethnic violence and Mahajir Qaumi Movement leaders with other 400 people arrested
1988- Ethnic groups in Sind and Karachi in particular won provincial election
1988- Benazir had to make a coalition govt with major ethnic group MQM in Sind
1990- Conflict between Sindhis and Muhajirs in Pucca Killa Hyderabad claimed hundreds of lives, Ref: Talbot-1998, "Pakistan a Modern History" Ch-10, pp-296 & 314 (election-1988 & 1990)
1990- The election results revealed the effects of conflicts between ethnic groups
1993-1999 Ethnic tension claimed more than 1,000 lives of religious leaders
2003-A religious leader and MNA assassinated near Islamabad by rival religious group

K 1970- General Elections held by an unstable Govt.
1971-Postponement of Assembly session.
1972- New democratic Govt leader statement quoted on P#2 "Pakistan Under Bhutto" (1971-1977) by Burki, S.J.-1980
1972- Police strike to raise wages
1972- Forceful retirement of 1,300 civil servants under martial law order
1973- New constitution passed fm National Assembly
1973- Baluchistan govt dismissed
1974- first constitutional amendment to empower govt to ban political parties, restricted free press reporting
1974- National press Trust was formed to sensor news before being published
1975- Political parties leader were forcefully sent out of National Assembly session with the help of notorious Federal Security Force (FSF)
1977- Zia implemented the martial law authority after suspending constitution
1978- A censorship on newspapers imposed with aims to" responsible journalism"
1978- Sharia courts formed to adjucate cases brought under Sharia law
1979- Islamic law of taxation introduced as the first policy of the military govt
1979- Punishments on crimes including alcohol drinking, theft, prostitution, fornication, adultery, & false witness were imposed according to Sharia law
1980- local bodies governments elections held to form basic democratic institutions
1981- A Majlis-e-Shura of 350 members formed to induct civilians in the government

1983 GDP growth from 4.9% - 6.2% revealed better implementation
of fifth five years plan (1978-83)
1984-1985 Government failed to raise domestic savings due to lack of
implementation of policies advised in sixth five year plan (1983-88)
1984- Poor performance in education (rate of 8%) A report by UNESCO -1984)
1984- Referendum turn out showed dissatisfaction by public on Zia's govt policies
1985- New Govt formed and still not in the stage to implement its policies
1986- 1st success of the new govt in restoration of 1973 constitution
1985-1988 Junejo government development program showed a GDP growth of 5%- 6%
1993- Shafiq Hashmi criticized the privatization program by IJI government
to be considered as government lack of implementation of accountability policy
Ref: "Privatization Policy" in Kennedy and Rais ," Pakistan in 1995"pp 31-47
for more details see Talbot-1998 " Pakistan , A Modern History" pp 319-320
1993-Ref: Samad, A. " Economic Policies by Government during 1990-93" on
Government's Education Policy
1994-1996 PPP government failed to implement the policies to service debt
due to rising uncomfort from the traders
Ref: Hussain Zahid, " The economic Squeeze", News line, Nov-1995 pp 22-7
Also see Far Eastern Economic Review, 159, no 26 (June-1996) p-66
1998- Govt implemented successfully General Sales Tax (GST) to cover up
Rs. 4,127 billion unpaid local debt to banks despite government deadline of Feb-1998
1999-2002 The rise in inflation and unemployment showed the failure of implementation
of economic policies by the Military government.
2002-2003 Semi democratic government headed by a military dictator
still struggling to overcome inflation and unemployment despite rise in reserves
L 1970-Yahya Khan also relied on bureaucracy, which played dominant role in elections
1972- 1300 civil servants forcefully retired from central government and
provincial government (Sind Province) to take from revenge political rivals
1972- At the same time recruitment of more than retired civil servants (1,374)
gives indication of employing pro government bureaucracy
1972-1977 the whole bureaucracy recruitment was political based
|Ref: Noman, O-1985, "Political Economy of Pakistan" chapter # 1, p # 62.
2000-Finally the autocratic democratic rule from 1988 to 1999 was marked
by a strong army and weak bureaucracy: "
Ref: Ghazali A S.-2000, "Hegemony of Elite ruling in Pakistan", Chapter 5.

Chapter 5
Empirical Models of FDI to Developing Countries
A Review

5.1 Introduction

Foreign direct investment (FDI) is one of the most effective ways by which developing countries become integrated globally with developed economies as FDI provides not only capital but also the technology and management know-how necessary for restructuring firms in the host economies (Estrin *et al* 1997). There is also evidence that there is a positive correlation between FDI inflows and the economic growth of the host economy (Taylor *et al* 1997). An important question for policy-makers is what the host government can do to attract FDI. Trade theory argues that the location choices by investing firms are influenced by traditional factors such as economic growth, market size, low wages, skilled labour force, and infrastructure along with non-traditional factors such as political risk, business operation risk, and work days lost risk due to political unrest in the country such as labour unions demands.

The focus of this chapter is to examine and analyse the empirical models of FDI in developing countries. In particular it examines the important empirical models utilizing most of the traditional factors such as economic growth, openness of trade, labour cost, infrastructure and non-traditional ones such as PR, WDL and the ORI index. F*irst*, political risk, PR, refers to risk of loss when investing in a given country caused by changes in a country's political structure or policies, such as tax laws, tariffs, expropriation of assets, or restriction in repatriation of profits. For example, a company may suffer from such loss in the case of expropriation or tightened foreign exchange repatriation rules or from increased credit risk if the government changes policies to make it difficult for the company to pay creditors. S*econd*, work days lost, WDL, due to labour industrial action, political unrest and illness, and *Third*, the operation risk index, ORI, here refers to the risk of direct or indirect loss resulting from inadequate or failed internal processes, people, systems and management or from external events. External events include legal and regulatory risks, disasters and infrastructure failures, business risks, outsourcing and supplier risks. In determining the effects on the flow of FDI to the world in general and developing countries in particular for 1970-2004 in a structured

framework, statistical and theoretical ideas will be developed and reviewed in this chapter.

Though the empirical studies have contradicted results on the individual role of traditional versus non-traditional determinants of FDI for different parts of world, there is still a need to investigate the joint effects of these determinants on the flow of FDI to developing countries 1970-2005 (Romita 2002).

First, the empirical models used to access the determinants affecting FDI inflows to a country positively or negatively will be analysed. The second part of the chapter will present an empirical analysis of these main determinants in reference to Pakistan economy and economic policies. Empirical results of the composite model[73] of developing countries for the last three decades will also be presented.

In the past, the impact of FDI on the economic development of the host country has been discussed thoroughly, leading to both positive and negative effects being identified. Most economists have also studied the factors affecting the inflows/outflows of FDI presenting a variety of results but there is still a need to construct a model for the future risks and returns to build investor confidence in the context of the previous risks and returns on their investments.

Despite the necessity of a positive relationship between return on investment and the flows of FDI to a country, it has become necessary to consider some major macro-economic and socio-economic factors to analyse the effect of the risks involved on the expected or projected return on foreign investments in developing countries.

It has been agreed universally that the eagerness of the developing world to host FDI is not only due to its contribution to the economic development but also to gain skills in the latest technology and organisational and managerial practices in order to compete in the international markets (Cho-2001).

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[73] Composite model means political, economic and social variables included in model

The most commonly cited models are those of Singh *et al* (1995), Cho (2001), Erdal *et al* (2002), Venkataramany (2002), and Romita (2002), which are considered to be the most recent studies on the empirical analysis of traditional and non-traditional determinants of FDI flows to developing countries. In these models, the economists have analysed three major hypotheses of economic, social, and political determinants. Despite a positive relationship between most of the major traditional macro-economic, social and political determinants and FDI inflows to developing countries, the political risk has been found to be a vital determinant to attract FDI to a developing country.
It is widely believed that foreign direct investment (FDI) flows into the less-developed economies (LDCs) have risen sharply in 1990s, and have therefore become an autonomous and dynamic factor in the industrialization and accelerated growth of economies (Morris 2004).

The purpose of this section is to briefly analyze the possible locational variables, identified as potential determinants influencing FDI decisions. The most intrinsic and important characteristics used to define FDI is to analyze the determinants, such as the economic development, trade openness, discount rate, exchange rate, human capital; labour costs; political stability, work days lost and operational risks etc. Each of the above determinants affects the decision-making of investing abroad (Agiomirgianakis *et al* 2000). A number of theories have tried to explain the determinants of FDI with a variety of results and positive / negative correlations with FDI (Singh *et al* 1995).

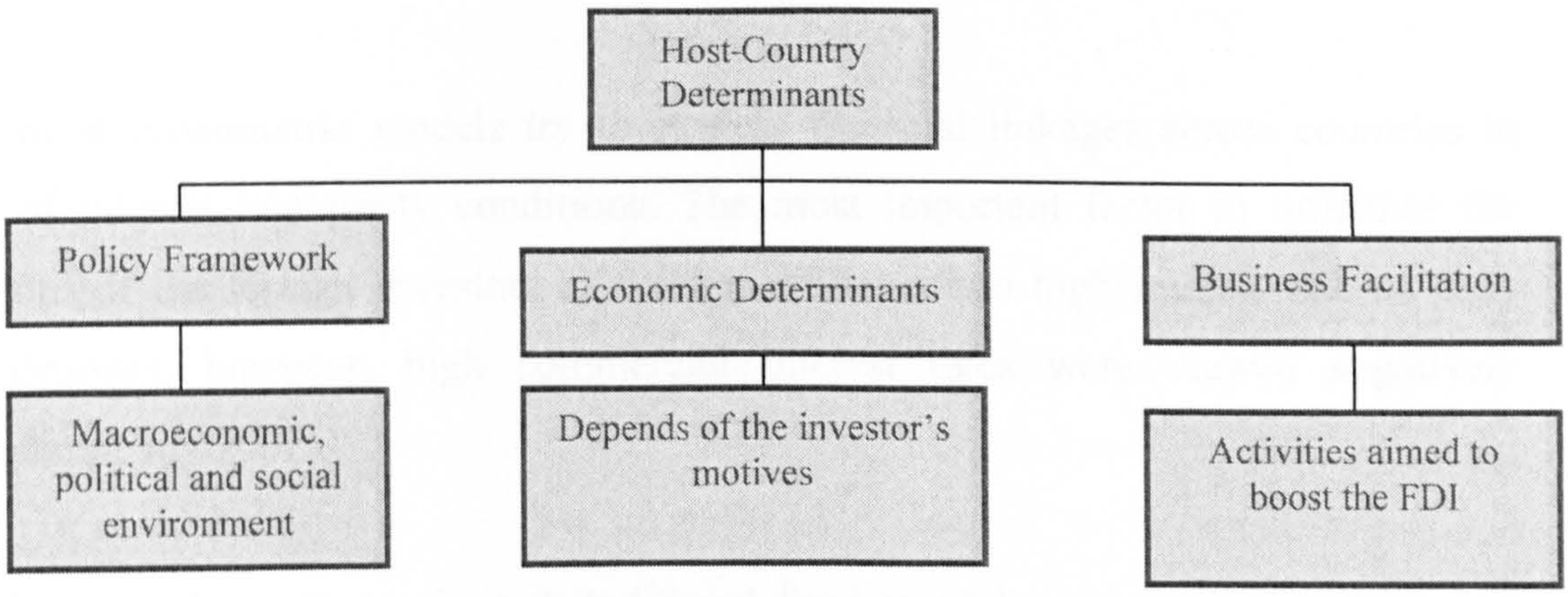
The aim of the international investors in gaining higher returns along with the security of their assets, leads them to look into the traditional macro-economic determinants of the FDI hosting country. These determinants have been tested and analysed by a number of economists since the 1980s, when there was a steep increase of FDI flows in the world in general and towards developing countries in particular. Some economists have studied the effect of major economic indicators by using different analytical approaches, e.g. econometric analysis, surveys etc. Most of the previous studies have analysed quite a number of macro-economic factors e.g. GDP, real exchange rate, exports, imports, trade balance, balance of payments, the openness of an economy and Forex Reserves etc. A few of the studies have analysed thoroughly the effects of socio-political factors, so it is required to study in depth the major macro-economic factors

such as, socio-political factors and the government policies for foreign capital inflows (FDI & FPI & Trade).

It has been unanimously agreed that FDI has a strong relationship with the major traditional economic indicators including the trade volume of the host country with rest of the world (Tadesse *et al* 2002).

The socio-political determinants including political instability, the business environment, law and order situation, ethnic violations, corruption, and infrastructure have been found to be insignificant (Mody 1992). Of course political risk is not only the main determinant of FDI since a strong correlation between political risk and FDI inflows has been found. In categorizing the political risk as a composite risk, Root (1979) has analysed the three major types of risk, first transfer risk related to trade, second operational risk related to the business operations and profitability of investment in the recipient country and finally the third type as ownership risk, which is closely related property rights of the investor. He found a strong relationship between all types of risk and FDI inflows to the recipient country. The country risk as a composite risk of political instability, work days lost, and operational risk, has also been negatively correlated to the investment decision and the expected returns on investments (Meldrum 2000).

What is important for FDI[74]?



[74] Adopted from UNCTAD WIR-1998

This chapter consists of two parts. In the first part of the chapter, we have reviewed the previous empirical studies of the determinants of FDI. In the second part, the methodology adopted by different empirical models has been reviewed to identify a practical methodology for an empirical study of Pakistan between 1970 and 2004. In the third part of the chapter, the empirical results of previous studies have been critically analyzed in the context of traditional and non-traditional determinants of FDI flows to developing countries.

5.2 Empirical Studies Review

A number of theories and perspectives have been developed to explain the level and pattern of FDI flow and stock to developing countries since the late 1950s, when the topic started to receive scholarly attention. Both theoretical and empirical research on FDI flows has emphasized differing causal variables. Extensive detail of empirical results of the most cited FDI models can be found in Table 5.2. While the theories on FDI present a much broader set of FDI determinants, including traditional and non-traditional determinants, the evidence from this study supports the contention that, while developing countries offer several location advantages to foreign investors in terms of market size; infrastructure; openness of the economy and market attractiveness, the instability of the exchange rate, economy and political system has hindered its efforts to increase the volume of FDI. The empirical work on FDI determinants generally comes in two forms: investor surveys and econometric analysis of the macro-economic data of the host country(s) either through time-series or panel analysis (Erdal *et al* 2002).

Thus, most econometric models try to express financial linkages across countries in terms of interest rate parity conditions. The most important factor to influence the intentions of the foreign investors as foreign affiliates is a high interest rate on their term deposits, however, high commercial interest rates were viewed negatively (Venkataramany 2002).

In addition to these economic and traditional fundamentals, government policies and capital market imperfections also determine international capital movements. The processes of deregulation, globalization, and innovation have a positive effect on the

flows of FDI to developing countries. The recent literature has also distinguished between two sets of factors affecting inward FDI.

The first is country-specific pull, factors consisting of domestic opportunity and risk, such as developing countries' creditworthiness. FDI may be attracted by the opportunity to use local raw materials or employ a local labour force, property rights and infrastructure.

The second set of determinants of FDI flows to developing countries is global-push-factors, which includes sharp increases in FDI flows from developed countries and the fall of U.S. discount rates (short, medium, and long term), as happened in the late 1980s. One would expect that, as the governments of developing countries make macro-economic and institutional reforms, international investors will gain confidence and be more willing to direct capital flows toward the new markets (Taylor *et al* 1997).

To explain the differences in the flow of FDI among developing countries, some analysts point to the salience of democracy, transparency and good governance, while others emphasize the need for a stable macro-economic environment and the capacity for economic management (World Bank 1997 & IMF 2001)[75].

As a number of studies proposed concrete models and methods to estimate the affects of traditional and non-traditional factors on FDI flows to developing countries, a general model can be stated in the following section.

5.3 Review of General Explanatory Variables

An important strand of literature has focused on an exclusive model of FDI determinants. A number of economists as show on Table 5.1 (page 150) used panel data and time-series techniques in order to identify the driving forces behind FDI for the period 1970-2004. The following factors are seen as FDI catalysts: i) size and growth rate of the domestic economy; ii) inflation; iii) human capital; iv) foreign trade openness; v) the extent and quality of the infrastructure, vi, level of interest rates, vii,

[75] World Bank, 1997, IMF, 2001, pp. 49-50

labour cost (wages) and viii, political stability, especially in those countries that have received large flows of FDI in the past.

Dunning (1977) made an early theoretical analysis of multinational firms, which considered FDI as being determined by ownership, location, and internalization advantages. Recent theoretical treatments have come up with general equilibrium models in which multinationals arise endogenously. The early literature has treated horizontal (Markusen 1984) and vertical (Helpman, 1984) multinationals separately, while the recent work has provided a unified framework (Maskus 2001b). The theory appears to work well empirically for FDI that either originates or is targeted at developed countries but the vertical model is rejected in favour of the horizontal one (Markusen and Maskus 2001a). It has been argued that they offer an explanation of the determinants of FDI in the long-run, but cannot well explain short-run fluctuations. One important explanation for the latter is the exchange rate, which has no role in real trade models. Empirically, both real exchange rate levels and fluctuations have been found to matter in explaining FDI and there is a sizable literature addressing the short-run issue.

Other researchers have used the gravity model, which has been shown to work well in explaining trade flows among countries, and adapted it to the study of the determinants of FDI (e.g. Brenton *et al* . 1999; Brainard 1997). The latter emphasizes the importance of economies of scale at the plant and the corporate level in determining multinational activity versus trade.

The impact of multinational firms on developing countries is one of the most hotly contested issues in the current debate over globalization. Much has been written about the macro-economic impact of foreign investment. This work goes beyond these macro-economic implications to focus on the political and social effects of foreign direct investment (FDI), particularly on the developing countries.

Despite a broad empirical literature on the determinants of FDI, the review of the literature shows that there is no clear agreement on the factors that determine FDI inflows to developing countries. The studies use diverse variables and often come to opposing findings on the relationship between certain variables and investment (table

5.1). Also included in the analysis are policy-related variables, tariff barriers proxied by import duty, corporate tax rates, openness to foreign trade and the quality of infrastructure.

Nevertheless, we can use past work to specify a reasonable model for the determinants of investment as a basis for understanding the impact of determinants on FDI in the case of Pakistan between 1970 and 2005. The rationale for the review of studies and models for the determinants of FDI flows to developing countries, in which economists have used most of the traditional and non-traditional determinants to analyse the results according to their theoretical and empirical findings. These models can be used as the starting point for an assessment of the fitness of these traditional and non-traditional variables for the analysis of FDI flows and stock for Pakistan between 1970 and 2004 as shown on Table 5.1 (page 153).

Table-5.1

Review: General Models explanatory Variable

	Variables										
		Dependent	Explanatory								
Author (s)	Year	FDI	GDP	OE	IR	Exgr	Infl	HC	LC	PR	Infr
Scheinder et al	1985	FDI	✓				✓		✓	✓	
Tsai Pan Long	1994	FDI	✓								
Singh & Jun	1995	FDI	✓			✓*				✓	
Nakamura S and Oyama T	1998	FDI	✓			✓					
Cho J Hye	2001	FDI	✓*						✓*	✓	
Kerr Ian	2001	FDI		✓	✓**	✓*					
Noorbakhsh et al	2001	FDI	✓	✓				✓			
Ramita Biswas	2002	FDI							✓	✓	
Venkataramany	2002	FDI	✓		✓		✓				
Banga Reshmi	2005	FDI	✓		✓	✓*					
Mody A & Murshid AP	2005	FDI	✓	✓*	✓						
Khawar, M	2005	FDI	✓*							✓	
George et al	2006	FDI	✓	✓				✓			✓
Chowdhury, A & Mavrotas G	2006	FDI	✓								

FDI=Foreign direct investment; GDP= real gross domestic product; OE= (exports + imports)/gdp; Exgr=real exchange rate; IR= real interest rate

Infl= annual inflation rate; HC=human capital; LC=labour cost; PR=political risk; OR=operations risk; Infr=infrastructure;

* = significant but wrong sign; ** = not significant

1: Economic Growth

The GDP of a host country indicates the economic strength of that country. A profit rational investor will favour investment in a country which has an acceptable growth rate of the economy (Khan *et al* 1999). Theoretical and empirical evidence considers two mechanisms playing an important role in attracting FDI: (a) the *market size* and (b) the *level of economic development*. Empirical investigations have found that the positive impact of FDI is generally higher for recipient countries with a higher level of development (Blomstorm *et al* 1994).

In defining GDP as an explanatory variable of FDI, we do not distinguish between local market and non-local market seeking FDI (Asiedu 2002). There are a number of definitions of GDP and its growth rate[76], and ideally we would like to specify and analyze the sensitivity of the results according to the different definitions. A substantial literature has developed confirming empirically the importance of the size of the host market and its growth rate. These are measured by real GDP, the growth rate of real GDP *per capita* or real GDP growth. The foreign investors that target the local market are assumed to be more attracted to the country with a higher growth rate of GDP as it indicates a larger potential demand for their products. In the literature, researchers have used both nominal and real GDP measures, as the variables (growth of real GDP and *per capita* real GDP) have shown bidirectional causality with FDI flows. Investment in capital-scarce poor countries is expected to yield higher returns, indicating an inverse relationship between GDP and FDI. Here we use GDP growth measured by the annual growth rate. We expect a positive association between GDP growth and FDI flows (Chowdhury *et al* 2006).

Erdal & Tatoglu (2002), after the testing of their hypothesis for the relationship between FDI inflows to Turkey and the effect of locational determinants, suggested that growth in the domestic market with an increase in the number of customers is positively related to foreign direct investment inflows, since the growth of the host country's market increases the opportunities for foreign investors to earn more profit through trade.

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[76] There are four other definitions of FDI found in the WDI data including: (i) net FDI, BoP in current US$, (ii) net FDI inflows as % of gross capital formation, (iii) net FDI inflows BoP in current US$, and (iv) gross FDI as % of GDP in PPP.

The general implication is that host countries with larger market sizes, faster economic growth and higher levels of economic development will provide more and better opportunities for these industries to exploit their ownership advantages and, therefore, will attract more market-oriented FDI. Even for export-oriented FDI, the market size of host countries is important because larger economies can provide larger economies of scale and spillover effects (Zhao, 1995).

2: Interest Rate

Another important push factor in the FDI literature is the level of interest rates in the home country. There is a general consensus that, all things being equal, high real interest rates hamper FDI. Albuquerque, Loayza and Serven (2002) find a significant and negative relation between the yield of the US T-Bill and FDI flows, both to industrialised and developing countries. Calvo *et al.* (2001) show that FDI flows to emerging countries are lower during U.S. monetary tightening.

Interest rates play an important major role in an economy trying to gain foreign investors' confidence. It has been noted that foreign affiliates will be satisfied with higher interest rates on their term deposits but will be hesitant if commercial interest rates were high. Venkataramany (2002), has used the term deposit interest rates and the rates charged by commercial banks on bills purchased and discounted in his empirical testing. He concluded that interest rates affect the flows of FDI globally in general and in the developing world in particular.

Although no empirical literature exists for the specific case of FDI, the same result should in principle be expected since low interest rates at home, leading to narrow interest margins and lower costs of capital at home, are one of the main reasons offered by banks to explain their operations abroad, particularly in emerging countries where margins tend to be much larger. Low international interest rates, which in turn favour the creditworthiness of emerging markets and make more appealing international investments, played important roles in the early inflows of the 1990s (Carlos *et al* 1998).

Vankitramanay (2002) concludes that real interest rates and the real rate of return in an economy are the most important factors to influence the intentions of foreign investors. Foreign affiliates are always satisfied with higher real interest rates on their term deposits but are hesitant if real commercial interest rates are high. The international investors worry about the real interest rate[77] and real rather than nominal rates of return.

3: Openness of the Economy

It is unanimously claimed and argued that international agreements on trade and investment also affect the volume and direction of FDI flows. First, the liberalization of capital inflows and outflows gains the confidence of foreign investors. Second, an export-oriented economy permits international firms (MNC) involved in different projects in the host country to acquire information about other markets to exports their production and gain profits through bilateral trade. From various studies, it has been found that the reasons for huge FDI inflows to China are only due to the exports policies of the country. Third, the MNCs can easily compete with other firms through the low cost production. Overall, a higher degree of openness is expected to be associated with a higher level of inward FDI activity as well as outward FDI. The exports plus imports level of a country is proposed as an approximation of its openness (Kyrkilis *et al* 2003).

The 1996 WTO report again stressed that empirical research suggests that to the extent that there is a systematic relationship between FDI and home country exports, it is positive but not very pronounced. Certainly, there is no serious empirical support for the view that FDI has an important negative effect on the overall level of exports from the home country. There is less evidence on the relationship between FDI and home country imports, but what exists tends to suggest a positive but weak relationship.

Studies have found a positive relationship between openness and FDI flows (Chakrabarti 2001). However, the relationship between openness and FDI is very complex, and needs careful explanation. To simplify this complexity, this work distinguishes between two categories of openness - "openness to trade" and "openness to capital flows." While the former refers to the ease by which goods and services are

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[77] If nominal interest rate= i and the inflation = π then the real interest rate = $r = i - \pi$

imported and exported, the latter refers to the absence of controls on the movement of capital. Trade openness attracts export-oriented FDI, while trade restriction attracts "tariff-jumping" FDI, whose primary interest is to take advantage of the domestic market.

In this study, I use the sum of imports and exports as a percentage of GDP to measure trade openness. Contrary to previous studies, however, expect the sign of the coefficient of an open economy to be indeterminate *a priori.* While a positive sign is the norm, a negative sign suggests that FDI in a country is tariff-jumping, as foreign investors seek to locate in the host economy to avoid high tariffs.

According to the sensitivity analysis of Chakrabarti (2001), openness to trade (proxied by exports plus imports to GDP) has the highest likelihood of being correlated (positively) with FDI among all explanatory variables classified as fragile.

Taylor (2000) resembles most other studies in that he does not assess changes over time in the importance of openness as an FDI determinant. His results do suggest, however, that a globalization-induced increase in the relevance of openness cannot be taken for granted. The positive correlation between openness and FDI is restricted to the manufacturing sector, whereas the correlation is insignificant for FDI by MNEs from the United States in the services sector. Considering that the recent boom in FDI to developing countries is largely because of FDI in non-traded services, the relevance of openness may even have declined.

Singh and Jun (1995), tested two basic hypotheses:
Hypotheses I: Do overall favourable business operating conditions affect positively the inflows of FDI? And (II): What Types of exports[78] are related to FDI inflows?

Business operating conditions are created by host government policies. The major types of business operating conditions can be stated as tax holidays, restriction on doing business, and relaxation or removal of protective tariff barriers. The question in

[78] Type of exports, particularly manufacturing exports, is a significant determinant of FDI flows. Singh (1995) has quoted an example of Singapore, where exports are highly significant determinant of FDI flows to the country.

hypothesis II has been explored using index values. Theoretically the facilities provided for better business conditions can be either productive or non-productive.

Despite the different results of the economic relationship, Singh *et al* (1995) tried to find out the types of exports, which can show better results. Singh (1995) found a positive relationship between manufacturing exports and FDI.

Erdal and Tatoglu (2002), after the testing of their hypothesis for the relationship between FDI inflows to Turkey and the effect of locational determinants, suggested that, since FDI is mostly in the form of physical investment, foreign investors would prefer host countries with better and more liberal economic policies.

Cho (2001) added more variables including trade openness (openness of the economy), labour cost etc. as determinants of FDI to China and found statistically significant results.

Venkataramany (2002) has analyzed the determinants of FDI inflows to India and included exports, imports, export intensity, import intensity, trade, balance of trade, terms of trade and the effects of these variables to be reflected in the exchange rate, GDP and also the inflation rate in India. The rationale for using the term 'trade' is to capture the influence of trade in creating a potential for FDI along with its causal role in a country's FDI. It is has been proved and analyzed by a number of economists, that the movement in the macro-economic factors like GDP, exchange rate, does effect the flow of FDI as show on Table 5.1 (page 150).

4: Exchange Rate

In reference to stable financial health, the exchange rate of the country is a major indicator of economic stability. An investor will try not to invest in a country with an unstable exchange rate as the volatility of the exchange rate has been found to be negatively correlated to the FDI inflows of the country (Lucas-1993). The investors will also decide not to invest in a country with unstable exchange rates, such as when Forex reserves are scarce, and this is expected to continue for the next twenty or so years (UNCTAD 1985). Exchange rates may affect FDI through several channels. The most significant path, however, lies in its effects on labour and other costs, which change the

comparative advantages of certain goods between two countries and thus encourage the transfer of production bases from one country to another.

The financial crises of the late 1990s have just begun to stimulate a small but growing literature on the effects of large, sudden, real exchange rate swings on a variety of economic variables, including FDI by MNEs. The effect of real exchange rates on FDI has been examined both with respect to changes in the bilateral level of the exchange rate between countries and in the volatility of real exchange rates.

Blonigen (1997) provided an analysis in which changes in the level of real exchange rates may affect inward FDI for a host country. If FDI by a firm is motivated by the acquisition of assets that are transferable within a firm across many markets without a currency transaction (e.g., firm-specific assets, such as technology, managerial skills, etc.), then an exchange rate appreciation of the foreign currency will lower the price of the asset in that foreign currency. Until Froot and Stein (1991), the common view was that (expected) changes in the level of the exchange rate would not alter the decision by a firm to invest in a foreign country. Other studies have generally found consistent evidence that short-run movements in higher exchange rates lead to increased inward FDI, with limited evidence that the effect is larger for merger and acquisition FDI.

A final, related strand of empirical studies shows how uncertainty and expectations about future exchange rate movements may affect FDI decisions. An early analysis by Cushman (1985) lays out a firm-level model of international investment that depends on the interaction of a firm's exchange rate expectations, trade linkages and financing options. One related issue that likely deserves more attention is how one measures expected exchange rate levels, uncertainty, or even volatility. Each of these papers has their own way of measuring these variables, but further investigation into appropriate measures and the sensitivity of results to alternative measures also deserves some attention (Blonigen-2004).

Erdal and Tatoglu (2002), after the testing of their hypothesis for the relationship between FDI inflows to Turkey and the effect of locational determinants, suggested that, since FDI is mostly in the form of physical investment, foreign investors would

prefer host countries where exchange rate instability appears to have a negative impact on FDI inflows. A highly volatile currency would discourage foreign investors from engaging in FDI in a host country's economy due the risk instability in the value of their investment.

5: Infrastructure

Foreign investors prefer economies with a well-developed network of roads, airports, water supply, uninterrupted power supply, telephones, and Internet access. A poor infrastructure increases the cost of doing business and reduces the rate of return on investment. Other things being equal, production costs are typically lower in countries with well-developed infrastructures than in countries with poor infrastructures. Countries with good infrastructures are therefore expected to attract more FDI (Morisset 2000). Infrastructure is proxied by the number of telephone lines per 1000 people in a country, and is expected to be positively correlated with FDI. The use of this proxy is informed by the fact that countries with a large number of telephone lines are more likely to have better roads, modern airports/seaports, Internet access, and water/electricity supply.

Erdal and Tatoglu (2002) also suggested that, since FDI is mostly in the form of physical investment, foreign investors would prefer host countries with better infrastructure.

6: Labour Cost

An economically active and skilled labour force in particular has been found to be a major determinant of FDI inflows to a country as the low cost labour plays a vital role in attracting the foreign, profit-maximizing, rational investors. The profit-seeking international firms like to invest in a country that is highly populated. The reason behind the high growth of FDI inflows to China and India is that they are heavily populated countries with low production costs (Erdal, *et al* 2002).

Labour costs are a controversial issue and it is agreed internationally that the low wages for labour are unfair but still most of the international firms pay low wages to their workforces in the developing countries to compete in the world markets (Cho 1998).

The exchange rate directly affects the labour cost, which, along-with exchange rate, has been found to be a statistically significant determinant of FDI in flows to recipient countries (Oyama *et al* 1998).

Labour market conditions include the wage rates and the quality of labour. Since the cost of labour is a major component of the cost function, various versions of the wage variables are frequently tested in the literature. A higher wage rate, other things being equal, deters inward foreign direct investment (FDI). This must be particularly so for the firms which engage in labour-intensive production activities. Therefore, conventionally, the expected sign for this variable is negative. However, there are no unanimous empirical results for the effect of labour cost on investment incentives in the existing literature. While some studies have shown no significant role for labour costs, others have shown a positive relationship between labour costs and FDI. The latter result is often attributed to a level of labour productivity or quality of human capital that may be reflected in the wage variables.

Cho (2001) and Rodrik's (1996) hypothesis about labour standards acting as a major determinant of FDI flows forms the basic model for their study in which they analyzed labour standards as an important and significant determinant for the FDI inflows to a country. Later, they included the political risk in the basic model, which revealed that the labour standards became statistically insignificant when the political environment was taken into consideration. In the final section of their study, they built an extended regression model to look into the behaviour of political risk and labour standards along with other determinants of FDI inflows. The model included, the population of the host country, the gross domestic product *per capita* of the recipient country and selected labour standards in the context of the cost of wages for the workforce.

The population is the main source of greater manpower available at lower costs along with higher DGP growth, which always encourages the international investors to move cross-border to reduce the cost of capital to secure higher returns on their investment (Cho 2001).

7: Human Capital

Human capital, in terms of both quality and availability, has been found to be an important determinant, considered to be promoting labour-intensive and export-oriented FDI. In the presence of human capital, the capital stock created by FDI expands the productivity potential of a firm or a country and enables FDI growth. Although it has been shown that the population increase has a negative relationship to the GDP growth and badly affects a country with limited resources, it is still considered as a positive sign for the attraction of FDI to a country with an abundance of human capital (Kyrkilis *et al* 2003).

The presence of workforce populations that are educated and trained to work in modern business organizations has been recognized as an important determinant of FDI flows (Rivlin 2001). The Republic of Ireland, for instance, has been a major recipient of FDI, partly because of the presence of an educated workforce in the country. In this study, human capital is measured by secondary school enrollment as a percentage of the population in the secondary school age category. This indicator is expected to be positively correlated with FDI flows. The level of human capital is demonstrated to be another important determinant of the marginal productivity of capital. It has been shown in various studies that skill-related variables are host-country specific. When a host country is more appealing to labour-intensive foreign investment that requires a relatively low level of skills, the importance of the human capital variable tends to be small. On the other hand, labour skills can be a more significant factor for a host country, in which more capital- and technology-intensive investment projects are concentrated. In this analysis, we use the illiteracy rate as a proxy for the level of human capital.

The study by Noorbakhsh *et al* (2001) offers insights into the non-traditional determinants of FDI in developing countries, though not with regard to trade-related variables. The focus of this study is on human capital as a determinant of FDI. As explained above, the human capital will provide more labour force at lower costs, which in return reduces the cost of capital and increases the real rate of return on investment.

8: Political Instability Risk (PR)

Analysts have established a link between political instability and FDI. Other things being equal, democratic and politically stable economies attract more FDI than despotic and unstable countries (Schneider and Frey 1985). Democratic regimes are also more likely to respect civil liberties, the rule of law and property rights; features that are more conducive to the flow of FDI.

Ngowi (2001) argues that many developing countries have attracted little FDI because they are regarded as "high risk and are characterized by a lack of political and institutional stability and predictability." A lack of political rights (PLOR) is expected to be negatively correlated with FDI flows.

Wei (1997) presents an alternative explanation for the large negative and significant effect of corruption on FDI. Unlike taxes, corruption is not transparent and involves many factors that are more arbitrary in nature. The agreement between a briber and a corrupt official is hard to enforce and creates more uncertainty over the total questionable payments or the final outcome. Wei demonstrates that this type of uncertainty, when induced by corruption, leads to a reduction in FDI. The political stability of a government and a sound rule of law can also be important factors to foster the inflow of FDI. Uncertain political environments and their related risks can impede FDI inflows in spite of favourable economic conditions. Since the indices of corruption, instability and the rule of law assign higher scores to better, less corrupt, law enforcement or a more stable country, the expected signs of the variables, *CORRUPT*, *GOV* and *LAW*, are all positive.

We will also be examining the significance of institutional factors in the determination of FDI by incorporating the level of corruption as an indicator of the rule of law and an indicator of the stability of each government. Corruption as well as a lack of the rule of law can discourage FDI by inducing a higher cost of doing business.

To analyse the effect of socio political instability, Singh & Jun (1995) used the Political Risk Index as the explanatory variable. This variable has been taken from Business Environment Risk Intelligence, S.A. (BERI), which includes; linguistic, ethnic, religious and societal conflict along with street violence. The analysis ranges from 0

(high instability) to 100 (high stability). In the model, RFDI was taken as the dependent variable for high and low FDI countries.

Despite the potential opportunities in a growing market, FDI flow to a country has become a complex phenomenon due to the involvement of political instability risk. At the same time, investors are interested in benefits that the new business can offer them. The international firms will be looking forward to a competitive rate of return to ignore the turmoil of the host country (Oleksiv-2000).

Cho (2001), in the final section of his study, builds an extended regression model for China to look into the behaviour of political risk and labour standards along with other determinants of FDI inflows. Cho (2001) also found political risk to be a significant determinant of FDI flows, as do Singh (1995) and Erdal (2002).

Despite being a major ingredient and a complex phenomenon of socio political determinants of FDI, there are still very few studies that have analysed the effects of the PRI on the inflows of FDI. PRI also includes the other risks of the host country like economic risk, regime legitimacy, ethnic violence and law & order risks. These risks, represented in total as the PRI, exert a negative impact on international investors' decisions to go abroad and invest in a country where there is turmoil and high risks (Singh 1995). Despite the negative effect of the PRI, the changes of political government have been found to have a significant effect on the inflows of FDI (Roots & Ahmed 1979). Many investors have paid heavily for overlooking disorder in the host country's political situation (Khan *et al* 1999).

9: Work Days Lost (WDL)

WDL is also a major determinant of FDI inflows to a politically unstable country with unreliable law & order, religious militancy and ethnic violence.

WDL happens due to different activities e.g. political agitation, strikes and natural disasters like floods or earthquakes. The first has been found insignificant for the inflows of FDI to the recipient country but the other two have dual effects on the international investors' decisions (Singh 1995).

3: Operation Risk Index (ORI)

ORI is an assessment of the general business condition in a country and consists of the investment policies of the host country government. It has a variety of effects on the inflow of FDI to a country. The relaxation of laws governing inward/outward capital flows and the tax holidays have a positive impact on FDI inflows. However, on the other side, frequent changes in investment policies have a negative impact upon FDI inflows. In reference to Pakistan, the general perception of the international investor is that there is a big gap between the government policies and their implementations (Khan *et al* 1999).

5.4 Empirical Results

The resilience of foreign direct investment (FDI) during the financial crises of the 1980's may have led many developing countries to regard international capital flow as private capital inflow. But evidence on the size of the specific benefits of FDI inflows to emerging markets is still very sketchy (Razin 2002).

Like the theoretical part, the empirical work has tended to focus either on underlying factors that explain the trends of FDI flows across developing countries, or macro-economic variables assessing the contribution of FDI flows to growth.

The independent variables, trade openness, the growth rate of market size and past changes in FDI inflows appear to be the strongest factors in attracting FDI examined in the analysis. They are believed to exert an influence on inward FDI in developing countries. These are variables that can be identified from the literature review as being important.

A substantial literature has developed confirming empirically the importance of the size of the host market and its growth rate. These variables have been measured by GDP, the growth rate of real GDP *per capita* or real GDP growth. The foreign investors that target the local market are assumed to be more attracted to the country with a higher growth rate of GDP as it indicates a larger potential demand for their products. In the literature, researchers have used both GDP, the growth of real GDP and *per capita* real

GDP as indicators of market size and the potential for the products of foreign investors. The empirical results are positive as expected in the theoretical literature (George *et al* 2006) as show on Table 5.1 and 5.2 (pages 150 and 170).

Labour market conditions include the wage rates and the quality of labour. Since the cost of labour is a major component of the cost function, various versions of the wage variables are frequently tested in the literature. A higher wage rate, other things being equal, deters inward foreign direct investment (FDI). Therefore, conventionally, the expected sign for this variable is negative. However, there are no unanimous empirical results for the effect of labour cost on investment incentives in the existing literature. While some studies have shown no significant role for labour costs, others have shown a positive relationship between labour costs and FDI. The latter result is often attributed to a level of labour productivity or quality of human capital that may be reflected in the wage variables.

The level of human capital is demonstrated to be another important determinant of the marginal productivity of capital. It has been shown in various studies that skill-related variables are host-country specific. Economic fundamentals, namely, large market size; low labour cost and human capital are the most important determinants of FDI inflows. Trade openness, the growth rate of market size and past changes in FDI inflows appear to be the strongest factors in attracting FDI.

The results from the selected empirical studies reported in table-5.2 are suggestive of the increasing importance of economic and socio-political factors over time. It can be concluded that political risk plays an increasingly important role over time in attracting FDI.

We also reviewed the significance of institutional factors in the determination of FDI by incorporating the level of corruption, an indicator of the rule of law and an indicator of the stability of each government. Corruption as well as a lack of the rule of law can discourage FDI by inducing a higher cost of doing business. The political stability of a government and a sound rule of law can also foster the inflow of FDI. Uncertain

political environments and their related risks can impede FDI inflows in spite of favourable economic conditions (Singh *et al* 1995).

The studies given in table-5.1 also included policy-related variables, tariff barriers proxied by import duty, corporate tax rates, openness to foreign trade and the quality of infrastructure in the analysis. The effect of higher tariffs imposed by the host countries may encourage the international investor to invest in a country with relatively low tariff barriers. Therefore, the expected sign of *trade terms* is negative (Venkatramanay 2001).

Given the fact that FDI from developed and developing countries are attracted to different selective polices of the host governments, the question that arises is should the host governments in developing countries aim at attracting FDI from developed countries and formulate their policies accordingly, e.g. signing investment agreements with developed countries, or should they concentrate on policies like fiscal incentives to attract FDI from developing countries? The answer to this question is, however, beyond the scope of this study and is also country-specific in nature since FDI from developed and developing countries constitute different shares of the total FDI inflows in a particular country. But what comes out clearly from the analysis is that policies with respect to cost factors, e.g., lower tariff rates, tax concessions, tax holidays etc. play an important role in attracting FDI from developing countries but these policies may not attract FDI from developed countries. What matters more to them are the policies that facilitate the businesses of foreign firms in the host country.

OE is included to examine the importance of the openness of an economy to international trade. This variable measures the degree of general trade restrictions of each country. Given that there is a negative relationship between trade tariffs and market-seeking FDI, a positive relationship has been found for export-oriented FDI as show on Table 5.1 and 5.2 (pages 150 and 170). In addition, in some economies, openness can be an indicator of economic reforms, where domestic reforms and foreign trade reform go hand in hand. FDI can be attracted to a country with more economic and policy reforms. Another policy-related variable that can influence the host country's location advantage is the host country's corporate or other tax rates. The evidence of the

significant negative influences of corporate tax rates is reported in a previous study by Wei (1997).

Political risk is likely to be an influential determinant of FDI while labour standards are not likely to have this effect. Empirical findings strongly support the hypothesis that political risk is significantly associated with FDI. Countries with higher political risks tend to attract smaller amounts of FDI. Once political risk is controlled for, regression results also show that labour standards are not strongly related to the value of FDI. The result for the relationship between political risk and FDI supports the theory that securing private property rights is important in investment decisions. The result may also explain the correlation between political risk and labour standards; because governments that are more committed to policy promises concerning property rights are also likely to be more responsible in observing labour standards. From the empirical finding on the effect of labour standards on FDI, we can draw an important implication. Although regression results reveal that labour standards do not influence the increase of FDI, neither do they deter FDI (Cho 2001).

Results show that lower tariff rates attract FDI inflows. However, fiscal incentives offered by the host governments are found to be less significant as compared to the removal of restrictions in attracting FDI inflows. The results of the analysis with respect to FDI from developed and developing countries show that economic fundamentals differ in terms of their significance in attracting FDI from developed countries and developing countries. FDI from developed countries is attracted to large market size, higher levels of education, better financial health, high standards of transport and communication and lower domestic lending rates, while FDI from developing countries is attracted to large market size, potential markets, lower labour costs, higher stock of transport and communication, lower lending rates and stable exchange rate. The impact of selective government policies on FDI also differs between developed and developing countries. Those that rely exclusively on low-cost, low-skill labour or natural resources to attract FDI will find it difficult to recruit FDI into high value-added industries and may suffer slower economic growth. Lall (1998) argues that, given minimum levels of skills and infrastructure, low labour costs may now matter only in a handful of low-

technology activities, such as low-end garment manufacture, since the semiconductor industry has become highly automated and capital intensive.

The results of the studies highlighted in Table 5.1 also emphasise the importance of government policies in attracting FDI inflows into developing countries. They show that, apart from the economic fundamentals of the economy, which may attract FDI inflows, selective policies of the host governments and investment agreements also play an important role. Within the selective policies adopted by the government, it is the removal of restrictions on the operations of foreign firms in the host country that matter the most, especially to FDI coming from the developed countries. Bilateral investment agreements and regional investment agreements can therefore form an important policy instrument for attracting FDI inflows into developing countries.

In a developing country, the foreign investors will require a higher rate of return on their investment as a premium for their risk-taking in a country with an unstable political environment. Along with this, the investors also look to the financial institutions to charge less for their purchases. For this analysis, interest rates will be used as an explanatory variable (Venkatramanay 2001).

The preliminary estimation results support many of the findings from the previous research in this area. In particular, (i) there is a positive relationship between the flow of FDI and economic growth; (ii) openness to trade has a positive impact on FDI flows; and (iii) the level of risk affects FDI negatively. Being highly indebted is a significant deterrent to FDI. In addition, the results indicate the presence of regional and income group heterogeneity in FDI flows, which is to be expected since the motives for FDI vary considerably across regions (Addison *et al* 2003).

Table-5.2:

Review: Results of Selective Empirical Studies

Dependent Variable		FDI										
	Country Of Study	No of Obs.	Study	R^2	Explanatory Variables							
					GDP	OE	IR	Exgr.	Infl.	HC	LC	PR
Scheinder et al (1985)	54 LDC	54	panel	0.69	0.21 (2.34)				-0.14 (-2.29)		-0.09 (-2.11)	-0.11 (-2.27)
Tsai Pan Long (1994)	Taiwan	28	Time Series		0.33 (2.78							
Singh & Jun (1995)	31DCs	373	panel	0.84	0.02 (1.36)			-0.01 (-2.46)				0.02 (2.67)
Nakamura & Oyama (1998)	East Asia (8)	36	Panel	0.80	0.31 (4.79)			1.86 (2.09)				
Cho J Hye (2001)	China	63	Time Series	0.62	-0.02 (-0.15)	0.94 (2.85)					0.002 (1.51)	0.31 (2.76
Kerr Ian (2001)	China	22	Time Series	0.71		18.63 (3.03)	**	-1.03 (-3.18)				
Noorbakhsh et al (2001)	D Cs		Panel	0.49	0.11 (2.89)	0.001 (2.54)				0.52 (4.04)		
Ramita Biswas (2002)	DCs (44)	273	Panel	0.57							-0.001 (1.76)	0.001 (1.55)
Venkataramany	India	88	Time	0.91	12,108		-958		-51,880			

(2001)			Series		(5.90)		(-16.1)		(-18.1)			
	Results Selective Empirical Studies (continued)											
Banga Reshmi (2005)	DCs (15)	255	Panel	0.54	0.20 (5.34)		0.003 (1.08)	-0.001 (-1.13)			-0.003 (-0.08)	
Mody & Murshid (2005)	DCs S A	59	Panel	0.86	0.33 (1.83)	-0.01 (-0.6)	-0.16 (-2.08)					
Khawar, Maruim (2005)	DCs	59	Panel	0.51	-0.013 (-3.74)							-0.01 (-1.74)
George et al (2006)	OECD	440	panel	0.60	3.13 (2.26)	0.58 (3.76)				16.63 (3.555)		
Chowdhury, & Mavrotas (2006)	S A (Pakistan)	40	Time Series	0.36	0.81 (3.00)							

Note: t-statistics in parenthesis: * FDI=Foreign direct investment; GDP= real gross domestic product; OE= (exports + imports)/gdp; Exgr=real exchange rate; Infl= annual inflation rate; HC=human capital; LC=labour cost; PR=political risk; IR= real interest rate; **=not significant; LDC=least developed countries; DC=developing countries; SA=Saouth Asia

5.5 Conclusion

This chapter has evaluated the results of most of the independent empirical studies into the determinants of FDI flows into developing countries over the period 1970-2004. In this chapter, the effect of three major macro-economic and socio political determinants on FDI inflows to developing countries have been examined with special emphasis on a few selected empirical models. The approach is important because developing countries in particular, have experienced fragile economic conditions and an unstable political environment since the 1970's.

The standard determinants considered include market size variables (real GDP growth rates, growth rates of real *per capita* income and GDP), policy variables (the degree of openness, corporate tax rates, import duties, quality of infrastructure), institutional characteristics (indices of corruption, degrees of government stability, indices of the rule of law) and labour market conditions (illiteracy rates and wage rates). Specifically, market size variables and policy variables, such as the lower corporate taxes and higher degrees of openness, play larger roles in attracting investment.

Despite a number of studies, there is an element of dissatisfaction with the existing empirical literature analyzing the determinants of foreign direct investment in developing countries. In particular, most studies concentrate exclusively on either political or economic determinants, instead of taking into account their joint and simultaneous effect.

The empirical models analyzed and reviewed in this chapter come from the existing literature. The purpose has been to compare the quality of the estimates and (ex post) forecasts of a model which concentrates exclusively on (a) a political determinant (political instability) and (b) which concentrates exclusively on economic determinants (growth of GNP. inflation, balance of payments, wage costs, skilled labour force). It may be concluded that foreign direct investment in developing countries is simultaneously determined by economic and political factors. It may further be concluded that an amalgamation of economic and political influences into a credit risk indicator is not advisable because it is not able to do justice to the complexity of politico-economic interdependence.

The most important economic determinants seem to be a country's level of development (as measured by real *per capita* GNP) and the balance of payments. The higher the *per capita* income and the lower the balance of payments deficit, the more foreign direct investment is attracted. Among the less important economic influences for attracting foreign direct investment are the growth of GNP, the workers' skill level and inflation whilst high wage costs reduce the inflow of foreign direct investment.

Another relevant factor is political instability, which significantly reduces the inflow of foreign direct investment, while the government's ideological position (right or left wing orientation) does not have a statistically significant influence. (Friedrich 1985)[79]

The location determinants tested in the next chapter will consist of three categories: the first are country-specific advantages such as low-cost labour, A large local market, skilled labour force, sufficient infrastructure and proximity to the West. The second group of variables to be tested is macro-economic policy and policy that facilitates business-operating conditions.

[79] Economic and political determinants of FDI

Chapter 6
A General model of FDI and The Econometric Methodology

6.1 Introduction

The distribution of foreign direct investment depends on both *economic and political* determinants. A country in which there is economic fragility and political unrest or in which there is a threat of having the investment nationalized (without adequate compensation) is more of a risk and therefore, all other things being equal, less attractive to invest in than a country offering political stability and a guarantee of property rights (Schneider *et al* 1985). In this chapter, a model is developed to investigate how economic factors and political risks in a country like Pakistan may influence the amount of FDI that the country attracts (section 6.2).

This general model is based on essentially neo-classical features, but with political features and other country specific factors integrated into the model. Moreover, by utilising an error correction estimation framework, both stock and flow aspects of the FDI decision can be modelled simultaneously. Both of these features are novel to this thesis.

Sections 6.3 and 6.4 discuss the estimation and regression methodology used to test the model and section 6.3 also reports the results of the preliminary unit root tests on the variables believed to affect FDI stock as discussed in the model for Pakistan in section 6.2.

6.2 A Model of FDI for Pakistan

A formal model describing the determinants of FDI in a country with a volatile macro-economic and political environment has been developed by augmenting the neo-classical approach to FDI by the addition of politico-social variables. The traditional approach to modelling FDI (see, for example, Kwok, 1970; Boatwright and Renton, 1974; Barrel and Pain, 1997) is to regard any FDI as underpinning part of the total, physical, domestic capital stock. Thus the model begins with the production function, which is assumed to be of the Cobb-Douglas form, such that:

$$Y = AK^{\alpha} L^{\beta} \qquad 6.1$$

where Y is output, K is the capital stock, L is labour input and A is a constant term which can capture Hick's neutral technical progress. Parameters α and β represent the homogeneity of the function such that if $\alpha + \beta = 1$, there are constant returns to scale, from 6.1 the marginal product of capital (MPK) is:

$$MPK = \alpha(Y / K) \qquad 6.2$$

Neo-classical economic theory argues that perfect competition prevails in all markets, hence the MPK should be equal to the real rental price of capital, defined as approximately equal to the real rate of interest, $r = i\text{-}\pi$, in the absence of capital consumption. In practice, i is equal to the long-term bond yield and π is the expected rate of inflation, therefore $\alpha(Y / K) = (i - \pi)$ and rearranging gives the optimal capital stock, K^* as:

$$K^* = \alpha Y /(i - \pi) \qquad 6.3$$

However, only part of the optimal, national capital stock is financed by direct foreign investment, the remainder being financed from domestic sources. So the real stock of FDI, denoted by S, is only a fraction, σ, of the optimal capital stock, such that:

$$S / K^* = \sigma \qquad 6.4$$

The proportion σ is likely to depend upon a vector of country-specific factors, Z, such that the proportion of FDI increases as the specific country conditions for FDI are perceived to become more favourable. Substituting (6.3) into (6.4) gives:

$$S = \sigma(Z)\alpha Y /(i - \pi) \qquad 6.5$$

Finally, postulating a log-linear relationship gives an (equilibrium) estimating equation of the form:

$$\ln S_t = \gamma_0 + \gamma_1 \ln Y_t + \gamma_2 r_t + \sum_{j=3}^{J} \gamma_j \ln Z_{jt} + \varepsilon_t \qquad 6.6$$

where ln denotes a natural logarithm, ε_t is the random error term and $\gamma_1 \rangle 0$ and $\gamma_2 \langle 0$.

The country-specific determinants included in Z are postulated to be the real exchange rate, E, defined as the domestic price of a unit of foreign currency deflated by the

domestic to foreign price ratio, the degree of openness with respect to trade, *OP*, and the degree of political risk, measured by an index of political stability, *PRI*, and a set of dummy variables capturing sudden shifts in the political environment.

In view of these considerations, the estimated long-run model becomes:

$$\ln S_t = \gamma_0 + \gamma_1 \ln Y_t + \gamma_2 r_t + \gamma_3 \ln E_t + \gamma_4 \ln OP_t + \gamma_5 \ln PRI_t + \varepsilon_t \qquad 6.7$$

where the expected signs are

$$\gamma_1 > 0, \quad \gamma_2 < 0, \quad \gamma_3 \lessgtr 0, \ \gamma_4 > 0 \text{ and } \gamma_5 > 0.$$

This general model can be tested empirically with the following interpretation:

i) A high level of GDP is an indicator of good development potential and rising market size in the future. This suggests a positive influence on FDI.

ii) A lower real interest rate is a better sign of internal economic activities and of stability in the growth rates. As a rule, the lower the interest rate, the more foreign direct investment decision-makers are inclined to engage in the country due to a lower cost of borrowed capital. A negative relationship is hypothesized, as shown in the model.

iii) On the one hand, a rise in host country competitiveness – a rise in *E* – is likely to increase the stock of FDI as foreign investors attempt buy into or set up local production facilities in the host country from which to export. On the other hand, the increase in the relative value of the host country currency will have the effect of increasing the real value of the existing stock of FDI and making further acquisitions relatively more-expensive.

iv) The ratio of goods traded (imports plus exports) to GDP is often used as a measure of the openness of an economy. This ratio is also often interpreted as a measure of trade restrictions. The impact of openness on FDI depends on the type of investment. When investments are market-seeking, trade restrictions (and therefore less openness) can have a positive impact on FDI. The reason stems from the "tariff jumping" hypothesis, which argues that foreign firms that seek to serve local markets may decide to set up subsidiaries in the host country if it is difficult to import their products to that country. In contrast multinational firms engaged in export-oriented investments may prefer to locate in a more open economy since the increased imperfections that accompany trade protection generally imply higher transaction costs associated with exporting. The lower the wage costs are, the more profitable it is directly to invest in the country concerned. A negative relationship to the foreign direct investment flow is hypothesized.

v) PRI is the index of political stability and expected to be positive, as a greater political stability should encourage further FDI.

vi) Dummy variables are also included in the model since the political instability of constitutional transfers of power in the host country does not have a significant influence on US foreign investment (Green 1972). Among the determinants of foreign direct investment in developing countries, economic instability is the prime determining with political variables being only of secondary importance. The political variables considered are political instability, a political competition index (the higher it is, the more legitimate is the political system, and the more foreign direct investment is expected to flow in), and the relations with neighbouring countries (which may be an indirect indicator for political risk) (Levis 1979).

Due to sudden changes of governments in Pakistan over the sample period, 1970-2004, and an expected effect of the policy changes by different governments (democratic or military dictatorship), several dummy variables have also been introduced into the model. These dummies are defined as follows:

Dummy (D1) has been chosen to explore the effect of joint Pakistan (present Pakistan and Bangladesh, which were separated into two countries in 1973) when a new government was formed in present Pakistan. Thus D1=1 in 1970-1972 and zero in all other periods.

The second period has been chosen for the elected political government for the period of 1973-1977 to explore the effect of the government's nationalisation policy. The dummy D2 has a value of unity for the period 1973-1977 and zero otherwise.

The third period, 1978-1988, has been chosen for the change in regime from political to military dictatorship to explore the effect of changes in major policies by the dictatorship government in order to denationalize the industries nationalized by the previous government. So dummy D3 has the value of 1 for 1978-1988 and zero otherwise.

The fourth period is for the change of government from military to elected democratic political governments 1979-1999. Despite a quick change and new governments through fresh general elections, the policies of different governments during 1978-1999 remained approximately the same. (i.e. deregulation, denationalization etc). So dummy D4 has a value of 1 for 1989-1999 and zero otherwise.

The fifth period has been chosen for another period of military rule beginning with the toppling of the elected political government in September-1999. Despite the policies of the present military dictatorship remaining unchanged, it is important to explore the effects on the democratic institutions and other components of PRI in the country for the period 1999-2004[80]. The dummy variable D5 has been assigned a value of unity for this period, 1999-2004[81].

To sum up, we can define dummy variables as those which are constructed by researchers in order to include non-quantitative factors in a regression model. These factors can distinguish two or more categories so that each dummy variable takes one value for the category we consider and a zero value for the rest of the categories. In other words, what we mean is that a sample can be divided into two or more partitions in which some or all of the coefficients may differ.

Political instability may disrupt the economic process and affect foreign investment in particular. Internal political troubles may be projected outwards and create additional difficulties for foreign-owned firms, including the threat of partial or total nationalization. This danger exists quite irrespective of whether the government is of left-wing or right-wing persuasion, because both types may resort to nationalism to strengthen their position. Because it is hypothesized that increased political instability induces marginal decision-makers to undertake less direct investment; a negative relationship is expected.

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[80] See appendix 4.2 & 4.3
[81] See appendix 4.2 & 4.3

6.3 Estimation Procedure

Time-series Analysis is the set of statistical methodologies that analyzes the kind of data used in the proposed model. The main tool in Time-series Analysis is a model that should reproduce the past behaviour of the series, exploiting its autocorrelation structure. The objectives of Time-series Analysis are basically two: to describe the regularity patterns present in the data and to forecast future observations. Since a pure time-series model does not include explanatory variables, these forecasts of future observations are simply extrapolations of the observed series at the end of the sample. If we consider a single variable in our study, we shall construct what is called a *univariate time-series model*. But if two of more variables are available, the possibility of dynamic interactions among them may be important. We can think, for instance, of economic variables such as consumption, investment and income that influence each other. In this case, *multivariate time-series models* can be constructed to take into account these relations among variables (Lütkepohl 1991).

During the discussion of stationary and non-stationary time series, it is required to test the presence of unit roots to avoid spurious regression results. The series containing a unit root can be called as non-stationary time series, which, when regressed with other variables of the series also containing a unit root, can produce spurious results showing a false economic relationship.

So, in principle, it is necessary to test the order of integration for each variable in the series to avoid such false relationships. If any variable is found with unit root, it is differenced until the non-stationary hypothesis is rejected to form a co-integrated equilibrium relationship.

There are several ways to test for the presence of unit roots in a time-series variable to establish co-integration between variables. The methods can be named as the Dickey and Fuller (1979) DF test, the Augmented Dickey-Fuller (1981) ADF-test and the Phillips-Perron tests (PP) [1987] based on the Phillip Z-test. The different tests are achieved assuming the presence of a unit root (non-stationary variable) in the null hypothesis (H_0) and a stationary variable in the alternative hypothesis (H_a). If the

calculated statistic is higher than McKinnon's critical value then we do not reject H_0 and the considered variable is non-stationary, if not it is stationary.

Beginning by estimating the equation

$$Y_t = \rho_a Y_{t-1} + \mu_t \qquad 6.8$$

or

$$\Delta Y_t = (\rho_a - 1) Y_{t-1} + \mu_t = \rho_b Y_{t-1} + \mu_t \qquad 6.9$$

Either variant of the test is applicable, with the null being H_0: $\rho_a = 1$ (the unit root) against the alternative H_1: $\rho_a < 1$[82].

If the null hypothesis is not rejected, the variable is differenced until the null hypothesis is rejected. However, it is also very important to select the appropriate lag length; too few lags may result in over-rejecting the null hypothesis when it is true, adversely affecting the size of the test, while too many may reduce the power of the test (reducing the numbers of observations) (Harris 1995).

In a preliminary step, unit root tests were performed using the Dickey Fuller 1979 test (DF) and the Augmented Dickey & Fuller-1981 (ADF) testing method to explore out the non-stationary / stationary properties of the data on FDI inflows and stock, real GDP (Y), openness of economy (OE), real interest rate (IR), real exchange rate (exgr), and political risk index (PR).

6.3.1 Testing for Unit Roots and Stationarity

As we have seen, the properties of a time-series depend on its order of integration, d, that is on the presence of unit roots. It is important to have techniques available to determine the actual form of nonstationarity and to distinguish between stochastic and deterministic trends if possible. There are two kinds of statistical tests: one group is based on the unit root hypothesis while the other is on the stationary null hypothesis.

There is a large literature on the theory of testing for unit roots. A good survey may be found in Dickey, Bell and Miller (1986), among others. The most common values for

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[82] It should be clear that testing for a unit root ($\rho_a = 1$) corresponds to testing for a coefficient on y_{t-1}. For expositional reasons, we have chosen to suppress the augmented part of the ADF test that requires that several lagged values of Δy_t be included as additional explanatory variables, to account for possible additional lagged values of y_t in the original specification, or to accommodate an autocorrelated μ_t. Critical values are the same as those used for the Dickey-Fuller (DF) test, which does not include lagged Δy_t values. Finally, we note that Ayat and Burridge (2000) also include a quadratic trend term; as is typical in the applied literature, we ignore this and other possible nonlinear trend specifications (Elder *et al*, 2001).

d are zero and 1 in economic and business time-series. That is why we have concentrated so far in testing the null hypothesis of one unit root against the alternative of stationarity (possibly in deviations from a mean or a linear trend). But it is possible that the series presents more than one unit root. If we want to test, in general, the hypothesis that a series is $I(d)$ against the alternative that it is $I(d-1)$, Dickey and Pentula (1987) suggest following a sequential procedure. First, we should test the null hypothesis of d unit roots against the alternative of $d-1$ unit roots. If we reject this H_0, then the null hypothesis of $d-1$ unit roots should be tested against the alternative of $d-2$ unit roots. Lastly, the null of one unit root is tested against the alternative of stationarity.

If we want to check the stationarity of a time-series or a linear combination of time-series, it would be interesting to test the null hypothesis of stationarity directly. Bearing in mind that the classical hypothesis-testing methodology ensures that the null hypothesis is accepted unless there is strong evidence against it, it is not surprising that a good number of empirical works show that standard unit-root tests fail to reject the null hypothesis for many economic time-series. Therefore, in trying to decide whether economic data are stationary or integrated, it would be useful to perform tests of the null hypothesis of stationarity as well as tests of the unit-root null hypothesis.

In reference to studies explained in the previous section, a regression has been run for the last 35 years (1970-2004) by using major macro-economic and socio-economic indicators of Pakistan's economy to discover the relationship between these macro-variables like GDP, GDP growth, trade openness, inflation, discount rate differential with respect to the US discount rate, exchange rate stability, unemployment, labour costs, infrastructure and, most importantly, political instability (1970-2004).

The unit root results sown in Table 6.1 show that all variables are integrated of order 1, except from the political stability index which is I(0).

Table-6.1

Unit Root Test Results

a) Unit root tests (ADF Method)

	with constant and no trend		with constant and trend	
	levels	first differences	levels	first differences
LIS	-1.049	-2.493	-1.197	-2.294
LISatI(2)	-5.488*		-5.506*	
LI	-0.846	-6.737*	-5.784(2)*	-6.670*
LY	-0.705	-3.466*	-1.217	-3.685*
LOE	-2.164(2)	-4.924*	-3.178(2)	-4.804*
LIR	-1.757	-4.581*		-4.500*
LEXGR	-1.777	-7.810*	-3.193(2)	-7.699*
LPR	-5.810*		-6.704*	
C.V:	-2.953	-2.9558	-3.551	-3.5562

Notes: All critical values are at 5% level, lags mentioned in parenthesis

b) Unit root tests (PP Method)

	with constant and trend		with constant and no trend	
	levels	first differences	levels	first differences
LIS	-0.509	-3.315*	-1.739	-3.174
LI	-1.081	-6.837*	-4.563*	-6.835*
LY	-0.156	-4.557*	-1.267	-4.534*
LOE	-3.463	-4.266**	-3.393	-4.421*
LIR	-1.716	-4.423*	-1.792	-4.216*
LEXGR	-1.548	-5.479*	-3.176	-5.486
LPR	-4.089*		-4.097*	
C.V:	-3.531	-3.535	-2.940	-2.942

Notes: All critical values are at 5% level except for LOE at 1% CV=3.639 with **

LIS = log FDI stock, LI =log FDI inflows, LY =log GDP, LOE =log Openness of Economy LIR = log discount rate, $LEXGR$ =log exchange rate, LPR = log political risk index, $C.V$ = critical value.

6.4 Regression Methodology

In econometrics, the relationships between the economic variables proposed by the theory are usually studied within the framework of linear regression models. The data of many economic and business variables are collected in the form of time series. As has been discussed in section 6.3.2, many of the macro-economic, finance and monetary variables are nonstationary presenting trending behaviour in most cases. In this section we deal with the problems that may appear when estimating regression models with time-series data. When nonstationary time-series are used in a regression model one may obtain apparently significant relationships from unrelated variables. This phenomenon is called *spurious regression*. Granger and Newbold (1974) estimated regression models of the type:

$$y_t = \beta_0 + \beta_1 x_t + \mu_t \qquad 6.10$$

where y_t and x_t were unrelated random walks:

$$\Delta y_t = \varepsilon_{1t} \qquad 6.11$$

$$\Delta x_t = \varepsilon_{2t} \qquad 6.12$$

Since x_t neither affects nor is affected by y_t, one expects the coefficient β to converge to zero and the coefficient of determination, R^2, to also tend to zero. However, they found that, frequently, the null hypothesis of no relationship is not rejected along with very high R^2 and very low Durbin-Watson statistics. It should be noted that the autocorrelation of the random walk x_t is projected into y_t which, also being a random walk, is also highly correlated. Following these results, they suggest that finding high R^2 and low D-W statistics can be a signal of a spurious regression. These results found by Granger and Newbold (1974) were later analytically explained by Phillips (1986).

Due to the problems raised by regressing nonstationary variables, econometricians have looked for solutions. Phillips (1986) shows that the standard results could be misleading as it does not solve the problem even if the series are integrated and a spurious regression result appears. Philips further suggested a second approach to working with nonstationary series, which is to look for relationships between stationary differenced series. However, the information about the long-run relationship is lost, and the economic relationship may be different between levels and between increments.

6.4.1 Cointegration Methods

The concept of cointegration is associated with the long-run equilibrium relationship between two or more variables. The economic interpretation of cointegration is that if the two series are linked to form a long-run equilibrium relationship, then, even though the time-series are non-stationary, they will move together until the difference between them becomes stationary. If the series are cointegrated, then regression analysis can give information about the long-run relationship, whereas if it is not cointegrated we return to the problem of spurious correlation. Once the tests of integration (that is unit root tests) are achieved, it is possible to implement tests of co-integration to check the existence of a stable, long-run relationship between the series (Harris and Sollis 2003, p.34).

Cointegration is also closely linked to short-run error correction models (ECM), thus providing a useful and meaningful link between the long-run and short-run approaches to econometric modelling (Harris 1995). There are few other techniques and approaches in the literature for testing and estimating cointegration relationships to identify the parameters associated with causality (Shan *et al* 1997)[83].

6.4.1.1 Engle-Granger (EG) approach

With the help of this procedure it is possible to examine the long-run relationships between two time-series' X_t and Y_t variables. If the two time-series are integrated as I(d), the linear relationship will also be I(d); i.e. the residuals obtained will also be I(d). The model developed by Engle-Granger (1987) can be used as a method of reconciling the short-run behaviour of an economic variable with the long-run behaviours between the two variables (Gujarati 2001) and the estimation is also possible through an OLS estimation method and there is no limitations on the number of observations, wh ich makes it easy to use the annual time-series data.

If both of the time-series are I(1), and the residual term ε_t - I(0), the two series would be cointegrated of order C1(1,1). This implies that if we wish to estimate the long-run

[83] With no stationary economic variables, VAR models carry much more economic content if modified in such a way that they can embody random walk and cointergration restrictions which reflect long-run equilibrium relationships among economic variables. This VAR-based cointergration method (Engle and Granger, 1987, 1988) is now known as vector error correction modelling (ECM). ECM models have received wide attention in other commodity markets, such as agricultural commodities, because of the economic realism and forecasting performance.

relationship between y_t and x_t, it is only necessary to estimate the following static model:

$$Y_t = \beta X_t + \varepsilon \qquad 6.13$$

Testing for a single equation can be problematic if n >2 variables in the model, and if n-1 of these is weakly exogenous, the single equation approach may be misleading. If an unrestricted dynamic approach is used in the single equation estimation, it is most likely to get unbiased estimates of the long-run relationship with appropriate t and F statistics. Harris (1995) further concludes that, if the number of cointegrating vectors is unknown, there seems little advantage starting with the single equation model. The multivariate VAR approach developed by Johansen (1988) would prove to be a better method of testing cointegration.

6.4.1.2 The Johansen (1988) and Juselius (1990) Approach

Johansen (1988) and Johansen and Juselius (1990) maximum-likelihood test procedure is the most efficient approach as it tests for the existence of a third cointegrating vector. Mallik *et al,* (2001) notes that there is a limitation on the number of observations, which makes it restrictive to use half-annual or quarterly data for estimation. Due to this limitation this method is not in very much used in the literature as it is mostly not possible to find out half-yearly or quarterly time-series data for most of the macro-economic variables.

As suggested by Johansen (1988) (also see Johansen, 1995), such a restriction can be analyzed by maximum likelihood methods. Maximum likelihood estimation requires solving a generalized Eigenvalue problem. Durnik *et al* (2001) claim that the standard method proposed in the statistical literature for solving this Eigenvalue problem is numerically undesirable. The first two methods above require that the variables in the system be of equal order of integration i.e. either I(0) or I(1). These methods do not include the information on structural breaks in time-series data and also suffer from low power. Due to these problems associated with the standard test methods, the OLS-based, autoregressive, distributed lag (ARDL) approach to cointegration has become popular in recent years.

6.4.1.3 Auto Regressive Distributive Lag Approach (ARDL)

The ARDL modelling approach popularized by Pesaran and Pesaran (1997), Pesaran and Smith (1998), Pesaran and Shin (1999) and Pesaran *et al* . (2001) has numerous advantages. The main advantage of this approach lies in the fact that it can be applied irrespective of whether the variables are I(0) or I(1) (Pesaran and Pesaran 1997, pp.302-303). Another advantage of this approach is that the model takes sufficient numbers of lags to capture the data-generating process in a general-to-specific modelling framework (Laurenceson and Chai 2003, p.28). Moreover, a dynamic error-correction model (ECM) can be derived from ARDL through a simple linear transformation (Banerjee *et al.* 1993, p.51). The ECM integrates the short-run dynamics with the long-run equilibrium without losing long-run information. It is also argued that using the ARDL approach avoids problems resulting from non-stationary time-series data (Laurenceson and Chai 2003, p.28).

To illustrate the ARDL modelling approach, the following simple model is considered:

$$y_t = \alpha + \beta x_t + \delta z_t + \varepsilon \qquad 6.14$$

where, yt, x_t and z_t are three different time series; e_t is a vector of stochastic error terms; and α, β and γ are the parameters. For the above equation, the error-correction version of the ARDL model is given by:

$$\Delta y_t = f(\Delta x_t, \Delta z_t) - \lambda(y_{t-1} - \alpha - \beta x_{t-1} - \delta z_{t-1}) \qquad 6.15$$

The ARDL model testing procedure starts with conducting the bounds test for the null hypothesis of no cointegration. The calculated F-statistic is compared with the critical value tabulated by Pesaran and Pesaran (1997) or Pesaran *et al.* (2001). If the test statistic exceeds the upper critical value, the null hypothesis of no long-run relationship can be rejected regardless of whether the underlying orders of integration of the variables are zero or one. Similarly, if the test statistic falls below a lower critical value, the null hypothesis is not rejected. However, if the sample test statistic falls between these two bounds, the result is inconclusive. When the order of integration of the variables is known and all the variables are I(1), the decision is made based on the upper bound. Similarly, if all the variables are I(0), then the decision is made based on the lower bound.

The ARDL method estimates $(p+1)k$ number of regressions in order to obtain optimal lag length for each variable, where p is the maximum number of lags to be used and k is the number of variables in the equation. The model can be selected using the model selection criteria like Schwartz-Bayesian Criteria (SBC) and Akaike's Information Criteria (AIC). SBC is known as the parsimonious model: selecting the smallest possible lag length, whereas AIC is known for selecting the maximum relevant lag length.

In the second step, the long-run relationship is estimated using the selected ARDL model. When there is a long-run relationship between variables, there exists an error-correction representation. Therefore, in the third step, the error-correction model is estimated. The error-correction model result indicates the speed of adjustment back to the long-run equilibrium after a short-run shock.

To ascertain the goodness of fit of the ARDL model, the diagnostic test and the stability test are conducted. The diagnostic test examines the serial correlation, functional form, normality and heteroscedasticity associated with the model. (Shrestha-2005).

The autoregressive distributed lag approach to cointegration (ARDL) following the methodology outlined in Pesaran and Shin (1999) is employed in this study. The main advantage of this procedure is that it can be applied regardless of the stationary properties of the variables in the sample and allows for inferences on long-run estimates, which is not possible under alternative cointegration procedures. Moreover, the number of variables in the model may be large, contrary to the VAR models.

More recently, however, Granger (1986) and Engle and Granger (1987) have also suggested modified causality tests for non-stationary variables that are cointegrated (i.e. variables whose long-term movements are related to each other). These tests are performed based on a dynamic model, referred to as the "error-correction model" (ECM) (Mahdavi *et al,* 1994). As simplified by the above discussion, an error-correction model (ECM) is a neat way of combining the long-run, cointegrating relationship between the levels' variables and the short-run relationship between the

first differences of the variables. It also has the advantage that all the variables in the estimated equation are stationary; hence there is no problem with spurious correlation.

6.5 Conclusion

The unit root test of the data set for Pakistan suggests that the relevant variables are a mixture of I(0) and I(1) variables (table 6.1). In this case the ARDL procedure is the appropriate estimation technique. Chapter 7 therefore examines the econometric results for the general model set out in this chapter using this procedure.

Chapter 7

Econometric Results and Analysis

7.1 Introduction

The theoretical model developed in the previous chapter is empirically tested in this chapter, to investigate how economic and political risks may influence the volume of inward FDI in a country like Pakistan. The basic theoretical model and hypothesis is based on the host country's economic factors, where predictable and stable political environment protects private property will influences the volume of FDI flows that Pakistan can attract and hold (Cho 2001). The ARDL methodology of macroeconomic and socio-political modelling for econometric analysis explained in the previous chapter will also be used to develop the final empirical model.

In economics "sensitivity analysis refers to the operation of a numerical model that represents the structure of the empirical analysis process" (Mier *et al* 1969, pp 1). Frey *et al*. (2002) define sensitivity analysis as the assessment of the impact of changes in input values on model outputs. Similarly, Saltelli *et al* (2000) define sensitivity analysis as the study of how the variation in the output of a model can be apportioned, qualitatively or quantitatively, among model inputs. The answers sought from the application of sensitivity analysis should always be clearly listed. The usefulness of sensitivity analysis can then be assessed based on whether the available methods of sensitivity analysis can address the questions under consideration in a manner that is appropriate to the characteristics of the model. Key motivations for performing a sensitivity analysis include the identification of key sources of variability and uncertainty in order to facilitate model development, verification and validation along with the prioritization of key sources of variability and uncertainty in order to prioritize additional data collection, research and general model refinement (Frey *et al*., 2002).

In this chapter the estimated empirical model is to be used to generate out-of sample forecasts of FDI inflows into Pakistan. In addition to a central forecast, sensitivity analysis will be used to develop alternative scenarios, based on alternative perceptions of political risk. Sensitivity analysis of the final empirical model in chapter 6 and three forecasting results have been presented in the next section.

7.2 Empirical Evidence

Prior to testing for non-causality, it is necessary to establish the order of integration present. To this end, an Augmented Dickey-Fuller test (ADF) was carried out on the time-series in levels and differenced forms. The tests were carried out on the macroeconomic variables $LFDIS, LGDPR, LIR, andLEXGR$ for Pakistan for the period 1970-2004. The null hypothesis that a time-series is non-stationary (i.e. has at least one unit root) has been accepted and a further test to investigate the stationarity of the variables applied the procedure of transforming the series into its first differenced form (see Table 6.1). The null hypothesis of non-stationary (when the time-series is expressed in first differenced form) has been rejected, which means that the macro-economic variables are integrated with an order of one, I (1). The results have been presented in Table 6.1 & 6.2 to finalize the methodology to be used for econometric analysis to reach a final dynamic model.

The political risk indices (LPR) have been tested for stationarity and the results revealed that the risk indices are stationary at I(0) (Table 6.1 & 6.2). The difference between the levels of integration in macro-economic variables ($LFDIS, LGDPR, LI, LEXGR$) and the political risk (LPR) has confirmed the use of the ARDL co-integration methodology as it does not take into account the level of integration of variables being used for the theoretical model.

7.2.1 ARDL Co-integration and ECM Estimation:

The ADF tests of the key variables revealed that $LFDIS, LGDPR, LI, andLEXGR$ are stationary in their first differences and are I(1) but PR is stationary at I(0). The level of $LFDIS, LGDPR, LI, LEXGR$ and LPR is at the constant market prices as at year 2000. ARDL co-integration methodology has been adopted as it does not depend upon whether a variable is I(0) or I(1). The error-correction co-integration analysis (ARDL) has been undertaken for the period as a whole (1970-2004) to display the short-run and long-run relationship between the stock of FDI and $LGDPR, LIR, LEXGR$ and LPR as an explanatory variable.

Table 7.1

Regression Results Using ARDL Procedure (lag=1)													
Depent Variable	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*
Indept Variable	*LPR*	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
ΔlIS	.83 t (17.6)*	.79 t (17.1)*	.79 t (16.7)*	.77 t (11.0)*	.80 t (14.5)*	.78 t (12.9)*	.85 t (18.3)*	.77 t (13.4)*	.82 t (12.2)*	.80 t (13.3)*	.82 t (15.4)*	.82 t (14.5)*	.80 t (14.9)*
Δly	.53 (2.62)*	.55 (3.27)*	.41 (2.36)*	.39 (2.05)*	.34 (1.92)**	.35 (2.0)**	.58 (2.62)*	.10 (.49)	.31 (1.45)	.42 2.04)**	.33 (1.84)**	.43 (2.60)*	.31 (1.76)**
ΔlIR	.06 (5.05)*	.05 (5.63)*	.05 (5.35)*	.05 (4.48)*	.05 (4.43)*	.04 (4.28)*	.04 (4.81)*	.05 (4.72)	.04 (4.31)*	.05 (4.44)*	.04 (4.31)*	.05 (5.36)*	.05 (4.47)*
ΔlEXGR	-.15 (.46)	-.07 (.25)	.15 (.53)	.22 (.76)	.18 (.62)	.27 (.93)	-.14 (.51)	.76 (1.96)**	.19 (.66)	.08 (.21)	.13 (.42)	.13 (.50)	.23 (.81)
ΔlPR	-.48 (1.38)												
ΔlGS		-.26 t (3.75)*											
ΔlSC			-.76 (3.22)*										
ΔlIP				-.20 (.95)									
ΔlIC					.06 (.81)								
ΔlEC						-.34 (1.12)							
ΔlCRP							.91 (3.32)*						
ΔlMIP								-.06 (1.61)**					
ΔlRT									-.03 (-.10)				

t-values in parenthesis; * significant at 5% ; ** significant at 10%; t = $\Delta l(X)1$; tt = $\Delta l(X)2$

Regression Results (continued)

	LPR	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
ΔlLO										.05 (.24)			
ΔlET											-.13 (.61)		
ΔlDA												.18 (1.33)	
ΔlBQ													-.27 (1.03)
C	-2.27 (-1.20)	-3.85 (4.20)*	-2.35 (1.61)	-2.85 (2.95)	-3.31 (3.14)*	-2.13 (1.77)**	-5.65 (2.16)*	-2.49 (2.53)*	-2.74 (1.17)	-2.63 1.91)**	-2.33 (1.64)	-3.53 (3.74)*	-1.90 (1.34)
D	-.27 (4.58)*	-.24 (4.19)*	-.28 (4.60)*	-.19 (2.16)	-.24 (3.69)*	-.25 (3.84)*	-.29 (4.31)*	-.32 (3.77)*	-.25 (3.03)*	-.24 (3.59)*	-.23 (3.21)*	-.27 (4.38)*	-.19 (2.19)*
ECM(−1)	-.17 (3.70)*	-.21 (4.52)*	-.21 (4.21)*	-.22 (3.25)*	-.19 (3.58)*	-.22 (3.62)*	-.15 (3.29)*	-.23 (4.12)*	-.18 (2.68)*	-.20 (3.26)*	-.18 (3.42)*	-.18 (3.24)*	-.19 (3.67)*
F – Stat	5.07 (5,21)	6.57 (5,22)	4.44 (5,22)	3.37 (5,22)	3.54 (6,21)	3.50 (6,21)	4.16 (6,21)	4.54 (6,20)	4.61 (6,21)	3.96 (5,22)	3.21 (5,22)	4.17 (5,22)	4.65 (5,22)
DW – Stat	2.18	1.98	2.23	1.75	1.66	1.93	2.15	1.94	1.73	1.96	1.77	2.18	1.74
R^2	.67	.71	.68	.56	.56	.57	.73	.62	.55	.60	.55	.66	.57
Lagrange Multiplier Stat	17.67 (5)	19.76 (5)	16.57 (5)	14.32 (5)	16.60 (6)	16.51 (6)	17.91 (6)	18.46 (6)	18.75 (6)	15.63 (5)	13.91 (5)	16.05 (5)	16.96 (5)
L/hood Mult.Stat	25.30 (5)	30.15 (5)	23.08 (5)	18.77 (5)	23.08 (6)	22.89 (6)	25.83 (6)	27.52 (6)	27.72 (6)	21.17 (5)	18.07 (5)	21.99 (5)	23.81 (5)
Observation	33	33	33	33	33	33	33	33	33	33	33	33	33

t-values in parenthesis; * significant at 5% ; ** significant at 10%; for *F – Stat* no of variables and observations in parenthesis

Diagnostic Test (lag= 1)

Depent. Var	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*
Expl. Var	*LPR*	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
Serial Corr	.49 (.48)	.003 (.95)	.74 (.39)	.48 (.49)	.53 (.47)	.01 (.94)	.35 (.56)	.01 (.91)	.43 (.51)	.003 (.96)	.35 (.55)	.44 (.51)	.17 (.68)
Funct. Form	1.44 (.23)	3.01 (.08)	1.88 (.17)	2.16 (.14)	1.10 (.29)	.58 (.45)	.21 (.65)	.81 (.37)	1.36 (.24)	1.22 (.27)	1.48 (.23)	3.44 (.07)	1.13 (.29)
Normality	.79 (.68)	1.02 (.60)	.77 (.68)	1.43 (.49)	1.69 (.43)	1.65 (.44)	.72 (.70)	.50 (.78)	1.65 (.44)	1.87 (.39)	1.80 (.41)	.69 (.71)	2.03 (.36)
Hetero-sced	.66 (.42)	.10 (.75)	.07 (.80)	.05 (.82)	.10 (.75)	.30 (.59)	1.39 (.24)	.31 (.58)	.02 (.88)	.17 (.68)	.05 (.82)	1.34 (.25)	.01 (.94)
Expl. Var	**Estimated Long-run Coefficients (Lag=1)**												
lY	3.03	2.63	1.95	1.71	1.73	1.61	3.83	.42	1.71	2.15	1.79	2.36	1.56
lIR	.26	.23	.23	.21	.23	.20	.26	.20	.24	.24	.24	.28	.23
lEXGR	-.85	.32	.74	.96	.89	1.23	-.96	3.23	1.05	.38	.70	.72	1.15
lPR	-2.12												
lGS		.48											
lSC			-1.49										
lIP				-.88									
lIC					.32								
lEC						-1.59							
lCRP							1.91						
lMIP								.27					
lRT									-.17				
lLO										-1.19			
lET											-.74		
lDA												-.58	
lBQ													-1.38
C	-13.12	-18.40	-11.31	-12.44	-16.71	-9.73	-37.05	-10.59	-15.23	-13.43	-12.83	-19.38	-9.61
D	-1.56	-1.13	-1.35	-.83	-1.24	-1.16	-1.92	-1.36	-1.39	-1.25	-1.27	-1.46	-.96

prob-values in parenthesis; * significant at 5%; ** significant at 10%

Table 7.2

Regression Results Using ARDL Procedure (lag=2)													
Depent Var.	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*
Expl. Var.	*LPR*	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
Δ*lIS*	.83 t (16.7)*	-.79 t (16.0)*	.77 t (14.5)*	.80 t (10.0)*	.71 t (10.9)*	.77 t (12.4)*	.82 t (15.9)*	.77 t 13.3)*	.78 t (12.1)*	.80 t (13.6)*	.76 t (10.9)*	.85 t (10.1)*	.66 t (10.6)*
Δ*ly*	.82 (3.08)*	.54 (3.11)*	.37 (2.10)*	.17 (.52)	.57 (2.76)*	.30 (1.59)**	.52 (3.61)	.21 (.84)	5.07tt (2.46)*	.47 (2.29)	.22 (1.14)	.48 (2.57)*	.09 (.55)
Δ*lIR*	.04 (5.35)*	.05 (5.53)*	.05 (5.44)*	.05 (4.36)*	.05 (5.58)*	.05 (4.34)*	.04 (4.92)	.05 (4.73)	.04 (3.8)	.05 (4.46)*	.05 (4.51)*	.04 (5.21)*	.06 (6.09)*
Δ*lEXGR*	-.72tt (2.47)*	-.03 (.16)	.28 (.90)	.47 (1.16)	.69 t (2.30)*	.39 (1.21)	.01 (.04)	.60 (1.38)	-.001 (.07)	.08 (.24)	.59 (1.22)	.001 (.02)	1.00 (3.03)*
Δ*lPR*	1.01 (2.45)*												
Δ*lGS*		-.26 tt (3.43)*											
Δ*lSC*			-.73t (3.06)*										
Δ*lIP*				.18 (.36)									
Δ*lIC*					.29 (3.04)								
Δ*lEC*						-.23 (.65)							
Δ*lCRP*							.86 (3.10)*						
Δ*lMIP*								-06 (1.42					
Δ*lRT*									-.29 (1.00)				

t-values in parenthesis; * significant at 5% ; ** significant at 10%; t = Δ*l*(*X*)1 ; tt = Δ*l*(*X*)2

Regression Results (continued)

	LPR	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
ΔlLO										.32 (1.22)			
ΔlET											.20 (.58)		
ΔlDA												.16 (1.13)	
ΔlBQ													1.08 (3.30)
C	-4.22 (1.25)	-3.96 (3.79)	-2.53 (1.72)	-3.17 (3.05)	-5.90 (5.08)	-2.48 (1.94)	-5.33 (-2.03)	-3.03 (2.49)	-1.60 (.72)	-4.20 (-2.50)	-4.02 (2.03)	-3.45 (3.56)	1.02 (.69)
*D*3	-.29 (5.25)*	-.24 (4.10)*	-.27 (4.36)*	-.27 (2.12)*	-.23 (-3.85)*	-.24 (3.50)*	-.27 (3.97)*	-.31 (3.58)*	-.17 (1.95)**	-.25 (3.79)*	-.25 (3.41)*	-.28 (4.11)*	-.03 (.29)
ECM(−1)	-.17 (3.32)	-.21 (4.35)*	-.23 (4..28)*	-.20 (2.43)*	-.29 (4.55)*	-.23 (3.70)*	-.18 (-3.40)*	-.23 (-4.09)*	-.22 (3.40)*	-.20 (3.42)*	-.24 (3.40)*	-.15 (1.17)**	-.34 (5.49)*
J – Test	-.09 (.43)	-.26 (1.04)	-.14 (.68)	.18 (.83)	.14 (.75)	.04 (.19)	-.08 (.36)	.01 (.03)	.13 (.62)	-.05 (.23)	-.17 (.78)	-017 (.72)	.001 (.02)
F – Stat	5.07 (5,21)	6.57 (5,22)	4.44 (5,22)	3.37 (5,22)	3.54 (6,21)	3.50 (6,21)	4.16 (6,21)	4.54 (6,20)	4.61 (6,21)	3.96 (5,22)	3.21 (5,22)	4.17 (5,22)	4.65 (5,22)
DW – Stat	2.04	1.95	2.23	1.81	2.05	1.89	2.16	1.98	2.20	2.03	1.79	2.28	2.31
R^2	.77	.71	.69	.58	.72	.58	.74	.62	.67	.64	.58	.67	.70
Lagrange Multiplier Stat	17.67 (5)	19.76 (5)	16.57 (5)	14.32 (5)	16.60 (6)	16.51 (6)	17.91 (6)	18.46 (6)	18.75 (6)	15.63 (5)	13.91 (5)	16.05 (5)	16.96 (5)
L/hood Mult. Stat	25.30 (5)	30.15 (5)	23.08 (5)	18.77 (5)	23.08 (6)	22.89 (6)	25.83 (6)	27.52 (6)	27.72 (6)	21.17 (5)	18.07 (5)	21.99 (5)	23.81 (5)
Observations	33	33	33	33	33	33	33	33	33	33	33	33	33

t-values in parenthesis; * significant at 5% ; ** significant at 10%; for *F – Stat* no of variables and observations in parenthesis

Diagnostic Test (Table 7.2 continued)													
Dependent Variable	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*	*LIS*
Expl. Variables	*LPR*	*LGS*	*LSC*	*LIP*	*LIC*	*LEC*	*LCRP*	*LMIP*	*LRT*	*LLO*	*LET*	*LDA*	*LBQ*
Serial Correlation	.06 (.81)	.3E-5 (1.00)	.58 (.45)	.20 (.65)	.05 (.83)	.03 (.85)	.30 (.59)	.001 (.97)	.48 (.49)	.02 (.89)	.28 (..60)	.98 (.32)	1.08 (.30)
Functional Form	6.05 (.01)	3.18 (.08)	2.92 (.09)	1.55 (.21)	2.51 (.11)	1.24 (.27)	.44 (.51)	1.17 (.28)	.24 (.63)	2.13 (.15)	1.74 (.19)	2.46 (.12)	2.13 (.15)
Normality	1.22 (.54)	.89 (.64)	.63 (.73)	.97 (.62)	.34 (.85)	1.22 (.54)	.89 (.64)	.56 (.76)	1.39 (.50)	1.00 (.61)	.47 (.79)	.49 (.78)	.04 (.98)
Hetero-Scedasticity	.04 (.85)	.08 (.77)	.01 (.90)	.05 (.83)	.63 (.43)	.14 (.71)	1.31 (.25)	.23 (.63)	.11 (.75)	.30 (.59)	.05 (.83)	1.91 (1.67)	.19 (.66)
Expl. Var	**Estimated Long-run Coefficients (Lag=2)**												
ly	4.90	2.54	1.62	.86	1.97	1.30	2.95	.89	1.95	2.32	.93	3.28	.26
lIR	.27	.23	.22	.24	.18	.20	.24	.20	.18	.23	.20	.35	.16
lEXGR	-3.45	-.15	-1.24	2.40	.39	1.69	.07	2.58	-.11	.42	2.49	.06	.95
lPR	-1.20												
lGS		-.37											
lSC			-1.22										
lIP				.90									
lIC					.98								
lEC						-.98							
lCRP							1.39						
lMIP								-.24					
lRT									-1.30				
lLO										-.27			
lET											-.85		
lDA												.1.25	
lBQ													-3.17
C	-25.38	-18.58	-11.12	-16.27	-21.10	-10.76	-30.29	-12.93	-7.29	-20.88	-16.95	-23.70	2.98
D3	-1.75	-1.10	-1.19	-1.39	-.77	-1.04	-1.57	-1.32	-.79	-1.26	-1.04	-1.95	-.09

prob-values in parenthesis; * significant at 5%; ** significant at 10%

7.3 Results: an analysis

7.3.1 Specification of Test

Tables 7.1 and 7.2 present the results from models with lag length 1 and 2 respectively. The purpose of presenting the results for the model with lag length 1 is to show the actual empirical results. The tests were run separately for the individual effect of the aggregate political risk components with lag 1 ARDL estimation. A variety of results were found revealing some of the components to be highly significant (government stability (GS), investment profile (IP), internal conflict (IC), and bureaucracy quality BQ) while some others showed insignificant effects in contradiction of the correlation test described earlier in chapter 4 (Tables 4.3, 4.4, 4.5, 4.6). The inclusion of the aggregate political risk index (PRI) into the lag 1 estimation model also did not reveal any significance despite being a major socio-economic determinant of FDI stock in Pakistan. The R^2 values in the lag 1 sample case also remained at an average of 50% for the model with PRI or the models with sub-components of PRI. Although there is a statistically significant error-correction term adjustment with the right sign at 5%, the macro-economic determinants along with PR still did not reveal a coefficient with the theoretically expected sign. From the regression and the correlation coefficients, we can draw the conclusion that a lag 1 model might not be the appropriate lag length for the estimation.

A number of tests have been run for the selection of the lag length, e.g. first, an F-test under a 'joint test for several regressions' hypothesis for the comparison of R^2 values (Pindyck & Rubinfeld 1981) and second, a J-test for the hypothesis of the significance of the residuals / fitted values of non-nested models. Firstly, a joint test of several regressions was done to find out the model lag length (Verbeek 2005). Finally, a model with lag length of 2 was chosen for the estimation and the results reported in Table 7.2.

7.3.2 Estimation Results

The analysis of the results is based on the 'within-estimation' method with a lag length of 2. It revealed that all the variables with aggregate political risk index were significant with the correct theoretical sign but that some of the variables in the sub-components model still did not show significant results, which is an understandable situation and found in the correlation test in chapter 4. The macro-economic variables economic

growth, interest rate and exchange rate, as well as the political risk index (PRI), have been found to be statistically significant in the short-run as well as in the long-run relationship with FDI stock by giving an indication of a significant increase or decrease in the stock of FDI if the explanatory variables are increased by 1%.

The results from Table 7.2 can be summarized as follows:

Levels of GDP (LY): This is positive and highly significant in its effect on FDI stock with a lag of two years revealing that the higher effects on FDI stock start after consistent economic growth in the host country for at least the previous two years.

The real interest rate (LIR) does not show a significant effect on the stock of FDI despite being statistically significant but with the wrong theoretical sign. The significance of interest rate revealed that, if the interest rate is kept either at 0% or lower than in the investor's country of origin, it will have a positive relationship with FDI stock. This is also found in the correlation test in Chapter 4.

The real exchange rate (LEXGR) showed a negative effect on the FDI stock but was statistically significant due to its pegging properties (Hussain 2006), which remained unstable historically in Pakistan (Table 6.7). The results reveal that, if the exchange rate remains unstable in the host country, it will have a negative effect on the FDI stock as can also be seen in the correlation matrix in Chapter 4.

Political risk (PR) is an aggregate risk index of political stability in Pakistan. Being a major socio-economic explanatory variable, it also revealed a statistically significant negative effect on the stock of FDI due to the political instability risk in the country during the period 1970-2004. The time profile of the adjustment effect of the PR effect on the stock of FDI is also presented in the following section for more analysis of PR and its effect on the future FDI stock. The error-correction coefficient is significant at the 10% level of significance and gives an indication of the co-integration of dependent and explanatory variables and also suggests a rapid adjustment process. The high value of R^2 shows that the overall goodness of fit of the models is satisfactory. With the F-

statistics measuring 5.07 (3.81) the co-integration variables in the model are statistically significant at the 5% level.

The long-run test statistics (Table 7.2) also reveal a significant long-run relationship between *LGDPR*, *LIR*, *LEXGR* and *LPR* and *LFDIS* in Pakistan. The coefficients of GDP, and IR, are positive and statistically significant (Table 7.2), whereas negative values for the variables EXGR and PR have been found, revealing the pegging property of the exchange rate (Hussain 2006) and that the instability of the political environment can have a negative effect on the FDI (Schneider *et al* 1985). The real interest rate (discount rate) coefficient does not give the correct theoretical sign but it can be accommodated by reference to the Islamisation of the economy and making it interest free. This might be helpful in attracting international investors to borrow in Pakistan and invest in the same place. PR has been found to be significant in the short-run along with its affective relationship in the long run. Theoretically political stability does not affect the international investor in the short-run but it shows its positive effects in the long-run after a lag of approximately 2-3 years (Table 7.2).

The sub-components of the PR index have also been tested to find out the relationship of the individual components to FDIS, which revealed mixed results with a few components being significant and other components not significant. Again this is similar to the results shown in the correlation matrix in chapter 4 for nominal and FDI stock and flows (Table 4.3, 4.4, 4.5, 4.6).

The results from table-7.2 and dynamic equation 7.1 clearly revealed that income growth is positively related to the flow of FDI to a country like Pakistan, where the economy has been fragile for decades. The interest rate has not shown a significant effect on the FDI, which perhaps indicates that international investors have not been interested in borrowing from Pakistan. The negative effect of the exchange rate may be due to the dual nature of exchange rate control (by government and free market) and the instability of the exchange rate, through changes in governments. The political instability risk index has revealed the right sign indicating that any movement in the political scenario will directly affect FDI to a country like Pakistan.

The diagnostic test results also reveal that no serial correlation, non-normality, or heteroscedasticity exist in the model and the functional form is not inappropriate. Thus the final model is stable and the estimation results are empirically robust.

7.4 ECM Adjustment: A time profile analysis

According to the results revealed for the short-run and long-run relationships between *LGDPR, LI, LEXGR* *LPR* and *LFDIS* during ARDL co-integration and error-correction testing methodology for the Lag 2 model (Table 7.2), it will be very useful to present a time profile chart for a better individual analysis of the relationship between ΔLPR and $\Delta LFDIS$ of the dynamic adjustment, as revealed by the dynamic equation. The following equation 7.1 is the estimated result of long-run model equation 6.7 along with estimation results for model 6.7 (lag-2) as shown on Table 7.2 (page 194, column 2).

$$\Delta S_t = -4.22 - 0.17 ecm_{(t-1)} + 0.83\Delta LS_{t-1} + .81\Delta LY + 0.04\Delta LIR - .89\Delta LEXGR + 1.01\Delta LPR \quad 7.1$$

$$\Rightarrow S_t = (1-0.17)S_{t-1} + 0.83\Delta S_{t-1} \quad 7.2$$

$$S_t = 0.83S_{t-1} + 0.83S_{t-1} - 0.83S_{t-2} \quad 7.3$$

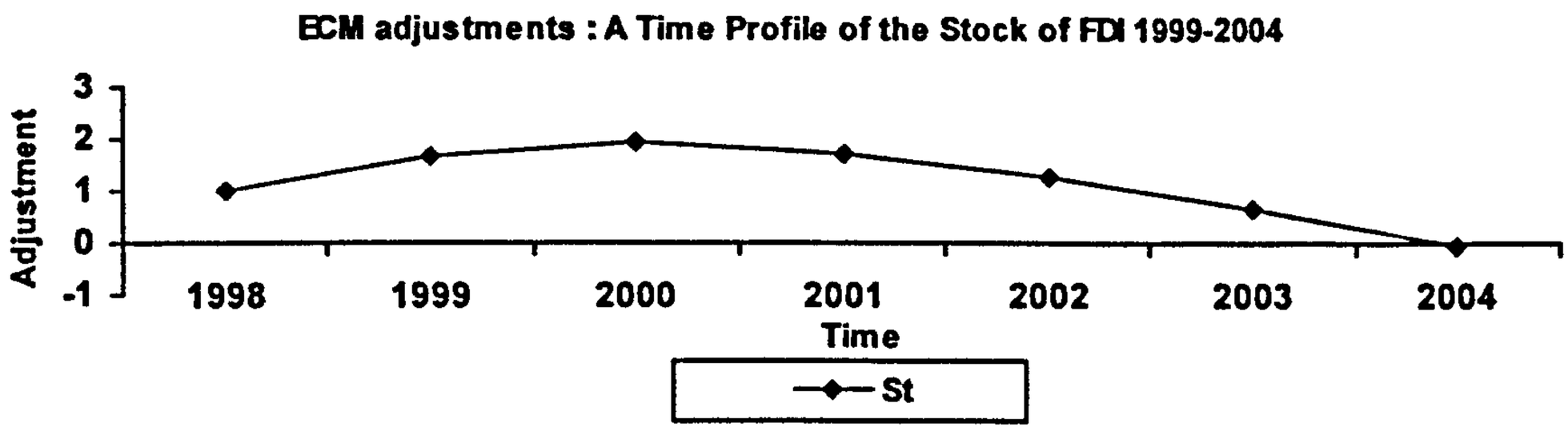
$$S_t = 1.66S_{t-1} - 0.83S_{t-2} \quad 7.4$$

From dynamic equation 7.1, it can be seen that the rise of 1% in ΔLPR leads to a rise of 1.01% of $\Delta LFDIS(\Delta S_t)$. The time profile of the adjustment for the period of 1994-2004 can be presented as follows:

Table 7.3 **Time Profile Table for FDIS adjustments**

	1998	1999	2000	2001	2002	2003	2004
LPR	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**	**1%**
S_t	**1.01**	**1.67**	**1.93**	**1.74**	**1.28**	**0.68**	**-0.06**

Chart-7.1



The time profile chart reveals the adjustment remained high for 4 years and was completed after 6 years according to the error correction term adjustment properties. This also tells us that following a 1% rise in *LPR* , the stock of FDI rises for five years; increasing sharply in the first year before flattering out and then falling over the next three years.

7.5 Sensitivity Analysis of PRI

The mathematical model in the preparation of PR simulation enables us to carry out an econometric analysis of the long-run relationship of the exogenous and endogenous variables for different values.

The simulation of an exogenous variable, such as PR, is done by altering the values of certain relevant components of PR and then testing the effect of these new values on the long-run relationship between FDI stock and PR. ADF tests for the analysis of causality and ECM tests for the analysis of the long-run relationship have used Microfit 4.1.

i) **PRA** – A 25% increase in TRP of PR

ii) **PRB**– A 50% increase in TRP of PR

iii) **PRC**– A 25% decrease in TRP of PR

iv) **PRD** –A 50% decrease in TRP of PR

7.6 Forecasts and Future Prospects

At the same time as the current risk assessments are produced, one- and five-year risk forecasts are produced using the same methodology. Three forecasts produced for each time period can be explained as follows:

i) Worst Case Forecast (WC Forecast)

ii) Most Probable Forecast (MP Forecast)

iii) Best Case Forecast (BC Forecast)

7.6.1 Worst Case Forecast (WC Forecast)

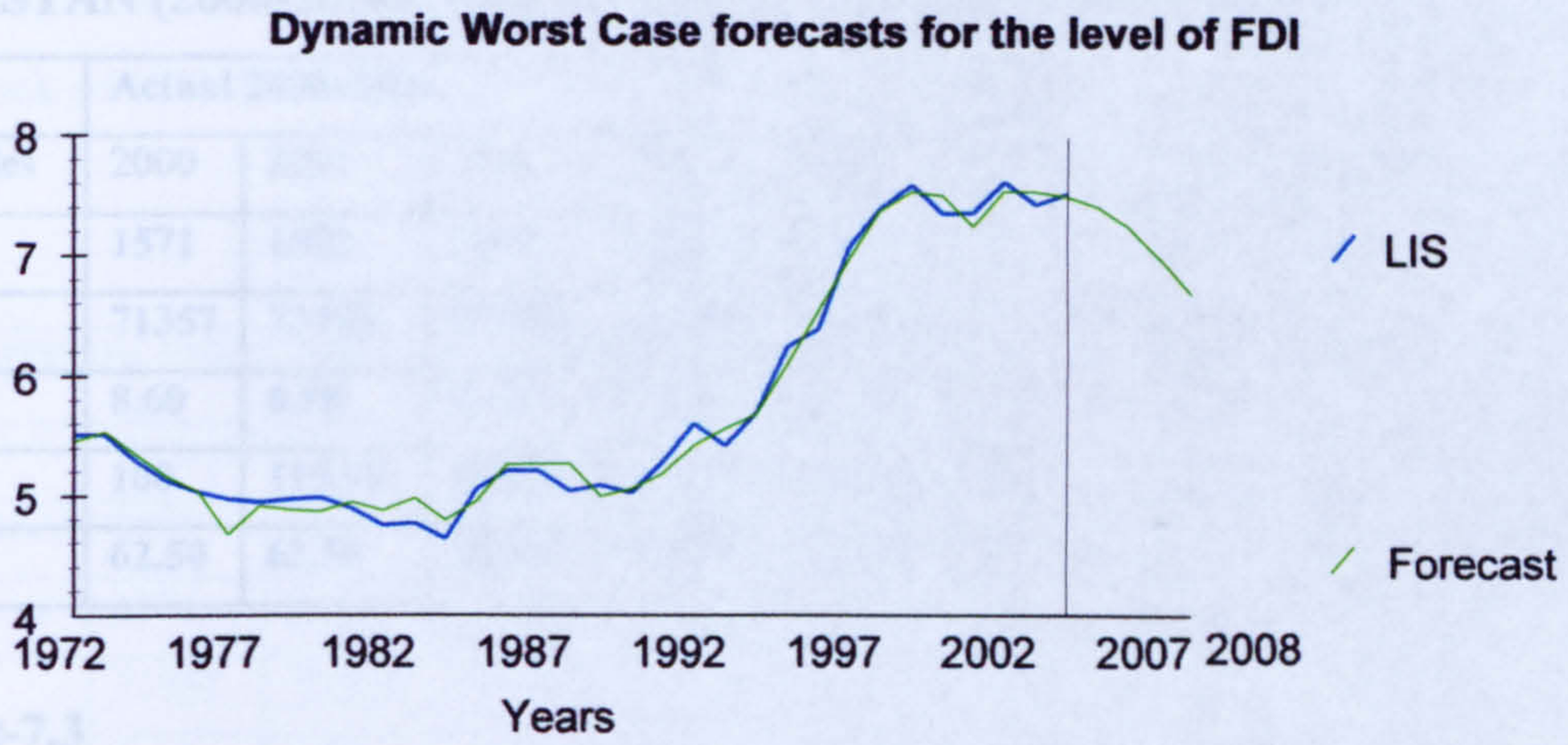
The **WC Forecast** is produced by extrapolating the negative/positive trend for each factor to produce a WC Forecast for GDP, IR, EXGR, and PR.

It has been assumed for 2005-08 that real GDP (Y) will show a negative trend of 8.4%, the real exchange rate and real interest rate (discount rate) will show positive trends of 4.1% and 5.2% respectively, while political risk (PR) will show a 1.8% negative trend thus giving an indication of higher risk in the political context as expected through the theoretical model. The FDI stock also captured the downtrend of the economy and the unstable exchange rate effects and the stock levels reducing at an average of minus 25% each year for the period 2005-2008, which indicates a long-run effect of economic growth, unstable exchange rate and higher interest rates along with highly unstable political factors, which in another way indicates that the FDI stock is dependent on the economic growth and exchange rate stability. PRI as in the co-integration test is also a major factor affecting the stock of FDI in Pakistan over the period 2005-2008 according to the long-run scenario.

Table-7.4

PAKISTAN (2000-2008) 2000-2004(actual), 2005-2008 (forecasts)									
	Actual 2000-2004					**FDIS WC forecasts 2005-2008**			
Variables	2000	2001	2002	2003	2004	2005	2006	2007	2008
IS	1571	1582	2051	1687	1858	1413	1191	863	542
Y	71357	73783	77546	82509	89440	81927	75045	68741	62967
IR	8.60	6.50	4.40	2.90	-1.80	2.90	4.40	6.50	8.60
EXGR	100	115.10	109.24	104.90	101.13	104.90	109.24	115.10	120.96
PR	62.50	63.50	68.50	70.75	69.50	68.27	67.06	65.88	64.72

Chart-7.2



7.6.2 Most Probable Forecast (MP Forecast)

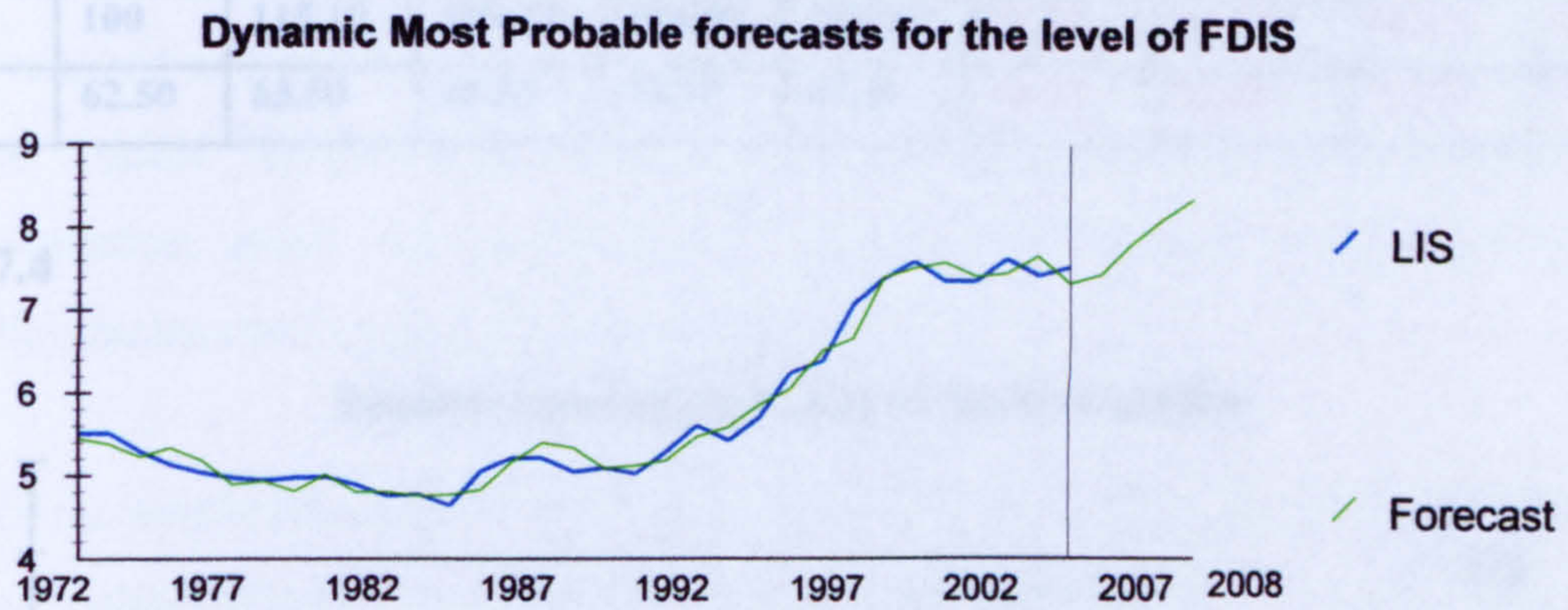
The **MP Forecast** is produced by extrapolating the most probable trend for each of the economic and political components to produce an MP Forecast for FDI stock during 2005-08.

In the first case of the most probable scenario, the indicators were assumed to show a 0% growth trend remaining the same in the years (2005-2008) along with PRI also at the same level as expected in the theoretical model. The FDI stock is affected by the 0% economic growth rate as well as the political risk factors. Since it is also dependent upon the FDI flows of the current year, it showed a downward trend despite the perceived stability in the economy and the political environment. Despite a positive trend in the flows of FDI (see Table 8.4), FDI stock had a minus 6.4% trend due to the 0% economic growth predicted for 2005-08. This indicates that FDI stock is not only dependent on the economic growth, exchange rate stability and interest rate in the short-run but also in the long-run scenario. Along with PR, it is as a major factor affecting the FDI stock in Pakistan (2005-2008) in the long-run but not in the short-run on Table 7.5 (page 204).

Table-7.5

PAKISTAN (2000-2008) 2000-2004(actual), 2005-2008 (forecasts)									
	Actual 2000-2004					**FDIS MP forecasts 2005-2008**			
Variables	2000	2001	2002	2003	2004	2005	2006	2007	2008
IS	1571	1582	2051	1687	1858	1740	1746	1749	1751
Y	71357	73783	77546	82509	89440	89440	89440	89440	89440
IR	8.60	6.50	4.40	2.90	-1.80	0.0001	0.0001	0.0001	0.0001
EXGR	100	115.10	109.24	104.90	101.13	101.13	101.13	101.13	101.13
PR	62.50	63.50	68.50	70.75	69.50	69.50	69.50	69.50	69.50

Chart-7.3



7.6.3 Best Case Forecast (BC Forecast)

Extrapolating the best-case trend for each factor including Y, YC, EXGR, INFL, and PR produces the BC Forecast.

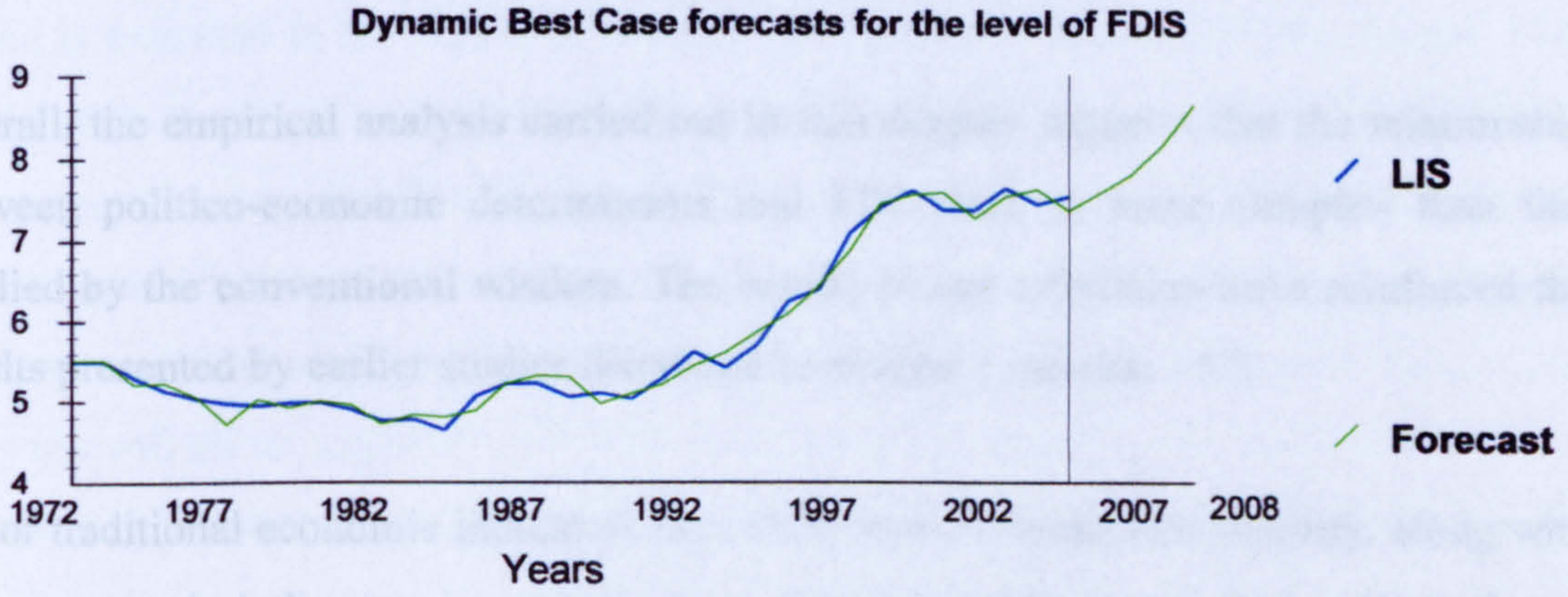
It has been assumed for 2005-08 that real GDP (Y) will grow at a rate of 8.4%, the real exchange rate and real interest rate (discount rate) will go down at rates of 4.1% and 5.2% respectively, while political risk (PR) will show a 1.8% upward trend, indicating the lower political risk predicted by the theoretical model. The FDI stock also captured the positive growth of the economy and stable exchange rate effects as the stock levels increased at an average of 1.13% during 2004-05 but is expected to grow faster for the remaining years at an average rate of 6% each year for 2005-2008. This indicates a long-run effect on the FDI stock of economic growth, the stable exchange rate and lower interest rates (as low as 0%) along with the stable political environment. In

another way this indicates that FDI stock is dependent on economic growth and exchange rate stability. PRI, as in the co-integration test, is also a major factor affecting the stock of FDI in Pakistan 2005-2008 in the long-run scenario.

Table-7.6

PAKISTAN (2000-2008) 2000-2004(actual), 2005-2008 (forecasts)									
	Actual 2000-2004					**FDIS BC forecasts 2005-2008**			
Variables	2000	2001	2002	2003	2004	2005	2006	2007	2008
FDIS	1571	1582	2051	1687	1858	2001	2424	3026	3749
Y	71357	73783	77546	82509	89440	96953	105097	113925	123495
IR	8.60	6.50	4.40	2.90	-1.80	0.0001	0.0001	0.0001	0.0001
EXGR	100	115.10	109.24	104.90	101.13	97.36	93.73	90.24	86.88
PR	62.50	63.50	68.50	70.75	69.50	70.75	72.00	73.27	74.56

Chart 7.4



7.7 Conclusion

The theoretical fitness model of FDI stock postulates that economic and political variables give a country a competitive advantage in the global FDI market.

The testing of the FDI Fitness model found that economic and political stability plays the central role in attracting and stocking FDI in a host country like Pakistan. Economic growth, law and order, and a corruption-free environment for investment are the governmental fitness factors. Market fitness is reflected in a stable exchange rate and lower discount rates, which attract the international investors to borrow from the host

country. Political stability also contributes positively to FDI inflows and stock, probably through institutional strengths and democratic accountability.

Given that market fitness is largely determined by economic policies, governmental fitness proves, in a certain sense, to be the FDI Fitness sub-concept with the greatest explanatory power. The econometric results strongly suggest that economic growth, a low discount rate, stable exchange rate and a more generally stable political environment are instrumental in attracting FDI. In other words, the fewer obstacles the foreign direct investors encounter, the more they will invest. The more the government does to provide an economic and politically stable framework conducive to FDI, the more FDI it will obtain. This is not surprising at all: most people go where they feel most welcome and/or where they can succeed in their endeavours. What is remarkable is what makes foreign direct investors feel welcome: it is policies and their implementation, rather than intransigent conditions. The results are very encouraging for policy-makers seeking to increase FDI inflows.

Overall, the empirical analysis carried out in this chapter suggests that the relationship between politico-economic determinants and FDI stock is more complex than that implied by the conventional wisdom. The results of our estimation have reinforced the results presented by earlier studies discussed in chapter 5, section - 5.3.

Major traditional economic indicators like, GDP and exchange rate stability, along with socio-economic indicators in general and political risk (PR) in particular, have shown positive relationships with and effects on FDI stock in Pakistan in the short-run as well as in the long-run. The diagnostic test analysis gives the indication of a stable model for Pakistan, showing no sign of serial correlation, non-normality or heteroscedasticity on Table 7.2 (page 196).

The preliminary statistical examination and the empirical testing of FDI flows and stock in Pakistan (1970-2004) in the context of theoretical economics of investment required a fundamental investigation and assessment of the empirical results and the ideas behind the notions of risk or uncertainty as applied to FDI. For further confirmation of the empirical model, sensitivity estimation has been run for the effect of political risk on

FDI in Pakistan. Four new risk indices were produced by increasing and decreasing the risk index by 25% and 50% respectively. The results revealed that there is not a big change in the relationship of the PR index with FDI stock along with similar macro-economic determinants.

While looking at the historical economic and political data, it has been found necessary to put forward the future expected FDI stock in the context of historical data. Three forecast cases have been tested empirically using the basic ICRG forecasting methodology.

The results revealed that, if the economy grows at the same rate of the previous years along with other macro-economic factors like lower discount rate, stable exchange rate and lower political risk the FDI stock is boosted (Table 7.6). In the second case, the most probable economic and political situation of country (the MP scenario) also revealed good results encouraging the international investors to invest in Pakistan, which is expected in the future to increase the level of FDI stock in the country. The third case is the worst case future situation during which the economy will suffer due to lower growth rates, the increase in the discount rate on borrowing from Pakistan and investing in Pakistan, the unstable exchange rate decreasing the worth of foreign currency exchange and, most importantly, the increase in the political risk factor. This situation will affect negatively the flow of FDI, in turn affecting the stock of FDI, as the investors will tend to withdraw their investment to find more stable countries in the region.

The best case (BC) and the most probable case (MP) scenarios encourage the Islamisation process of the Pakistani economy and financial sector. The zero interest rate charge on the borrowing also encourages international investors to become involved with modes of Islamic investment such as Musharqah and Mudharabah (Chapter 3, section 3.3), as direct investment is considered to be the method nearest to the Islamic investment methodology.

Chapter 8

Summary and Conclusion

This thesis has attempted to explore the principal economic and political factors that determine the stock of FDI capital in Pakistan. This is the first such study of this aspect of Pakistan's economic development. This thesis shows that an aggregate, neo-classical type, production function can be used to capture the main features of the stock of FDI capital. That is, it is largely determined by the level of income in the home economy, although other economic factors such the exchange rate can also play a role.

A second finding is that non-economic factors, such as political risk, are also important. To this end, several alternative indices of political risk have been computed and nested within the model. The coefficients move invariably and are statistically significant, although the stock of FDI responded only in elastically until the incorporation into the model of changes in political risk. New flows, however, are empirically more sensitive to risk. Furthermore, sensitivity analysis of FDI and risk shows that political stability is important for the growth of FDI in Pakistan.

With respect to country risk, Pakistan can be considered a high-risk state because of both serious domestic crises and the danger of cross-border conflicts. The federal structure, the threat of the state being captured by conservative religious militants, ethnic and sectarian divisions, chronic economic difficulties, alienation of the people from the state and the degrading of the institutions of civil society also pose a great threat to international investment. On the external front, the dispute with India continues to pose the danger of a war in which nuclear weapons could be used.

The presence of the military in politics has aggravated the economic and financial policies as in the first period of military rule in 1959. Sometimes, the military regimes (1977-1988) have encouraged fundamentalist religious lobbies that decry constitutional, democratic and human rights and there remains the unresolved question of the succession to the military regime (Rehman-2002).

Keeping in mind the following risks, this may affect the overall performance of the economy in the current fiscal year and have effects on future overall economic growth. Along with the risk of prolonged military dictatorship, Pakistan is also exposed to the following major risks that may affect the economic, financial and political system.

a) The geographical location and relations with neighbouring countries pose a threat of a third war with more sophisticated, possibly nuclear, weaponry.

b) Agriculture is the backbone of the economy of Pakistan. The majority of the irrigation is done through the canal system and shortages of irrigation water of up to 40 percent may adversely affect the performance of agriculture in general, especially major crops including wheat, sugar cane and, in particular, cotton. The major part of GDP is contributed by agriculture and the drops in the production of major crops due to drought have severe effect upon the economy.

c) The real GDP grew strongly by 7.5% during 2003-04 after the lowest growth of 1.8% during 2000-2001. (Table 8.1)[84].

d) The major factor of this burden is the instability of the governments, which has adversely affected investor's confidence. The remittances from the workforce abroad have also decreased over the period 1970-2004.

The thorough study of the political economy of Pakistan acknowledges the relationship of the state of the economy and polity as being at the forefront of the necessary development of a country. This means that an economic science that does not account for the political aspect of the country is less than satisfactory. So it can be concluded finally that an economy must be a political economy (Bruno 1978).

The successive attempts at authoritarian rule over the country have created gaps between different ethnic, linguistic and regional groups, which have given rise to ethnic violence and political instability. As the political governments have been weak and hostile towards the opposition, the bureaucracy has been provided with an opportunity

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[84] http://www.finance.gov.pk/survey/sur_chap_05-06/01-Growth.pdf

to operate independently and 'play its own game'. All the above policies were pursued at the cost of the ordinary people of the country whose lives became harder and more miserable day-by-day. The present socio-economic conditions of Pakistan are not up to the mark by any standard. The country has yet to attain political stability. The labour force is undisciplined and largely unskilled. The country seems to be caught in a vicious cycle of corruption and looting. On the economic front, exports are almost stagnant and consist of traditional agro-based products with little value-addition. The possibility of a reduction in the import bill is remote. Despite being a predominantly agro-based economy, every year billions of rupees are spent on the import of edible oil and wheat. The budget and current account deficits are seemingly unmanageable. Problems of unemployment and inflation are unprecedented. On top of this, ethnic problems and the bad law and order situation in Karachi are major areas of concern for every patriotic Pakistani. It is very disturbing to think about what the 21st century holds with the current sluggishness on almost all fronts. The picture of the economy portrayed above is, no doubt, grim and gloomy, but not beyond salvation (Ahmed, 2000). In a country where no elected government has ever completed its full term in office and the rule of law has rarely applied to the rich, powerful and corrupt, another such failure could encourage those who argue that Pakistan must try a new formula (Macko, 1998).

After considering the political economy (PE) of Pakistan, it became necessary to look into the short- and long-run relationships between foreign direct investment stock and economic growth, the openness of the economy, interest rates (discount rate), the exchange rate and political risk for 1970-2004. The effect of economic instability was negative but not statistically significant. Hence, the evidence from this study supports economic stability, the openness of the economy for trade with lower barriers on trade and a lower discount rate. First, while most of the studies cited in the literature suggest a positive and significant relationship between FDI and the economic stability and growth of the host country, they usually fail to establish a statistical relationship between foreign direct investment and other variables such as economic growth, the openness of the economy, interest rates (discount rate), the exchange rate and political risk.

This may be explained, to a great extent, by such factors as the nature of the data and the data process, estimation techniques, the sample chosen, and the country's own

characteristics. Secondly, unlike the other works drawing on cross-sectional data, using time-series data for a single country appears to be a useful approach by which to capture relationships between FDI and its locational determinants (Erdal, 2002).

Because of the small sample size and the unavailability of data on some important variables, which has hindered the control of their impact on FDI inflows in Pakistan, caution has been exercised when interpreting the results. However, the results show clearly the factors which have influenced foreign investors' decisions in choosing a location in the estimated directions for their investments. For a further exploration of FDI in Pakistan, the political risk was added as a major factor to find out the joint affect on FDI inflows to Pakistan.

In the light of the study of country risk in general and political risk, an attempt has been made to calculate a quantitative risk index with qualitative information on politics, the economy, and different internal and external issues for the period 1970-2004. These particular risk indices known as PRI may constitute a large part of the total risk investors may face when investing in emerging markets. We have examined how PR may be defined and the sources of information on which an analysis of political risk may be based. We suggest a valuation model based on the contingent claims valuation methodology, where PRI has been used as the independent variable along with GDPR, EXGR and IR. We report summaries of tests made to examine whether the assumptions underlying this model are reasonable. How such a model may be implemented when evaluating FDI inflows and stock under political risk in Pakistan has also been demonstrated.

Finally, it is suggested that economic and political instability risks play a vital role when assessing whether a country is to be favoured with FDI. The majority of empirical studies investigate certain determinants of FDI in certain regions or groups of countries. Although literature on the empirical determinants of FDO flow and stock in the Asian countries in general, and the South Asian region in particular, is wide and varied, the empirical work has not directly and fully addressed the effect of political instability risk on FDI in the region in general and Pakistan in particular. However, some of the recent

studies (Singh, 1995) shed some light on FDI in the South Asian region as the influence of these determinants has been tested to a lesser extent.

The first contribution made in this study is the indexation of political risk during the period 1970-2004 and afterwards the estimation of the political risk index along with other macro-economic variables linked to the FDI stock in Pakistan (1970-2004). However, the estimation results allow the presentation of an empirical model of the determinants of FDI capturing the influence of structural breaks in the political system through dummy variables. This model aims to provide long-term guidance and support to the policy makers in Pakistan as they set the targets to be achieved by the government and may have a role to play in developing countries in general and Muslim countries in particular.

The sensitivity analysis of PR has also revealed that increases or decreases in the PR index can have similar short-run and long-run effects on the flow and stock of FDI in Pakistan.

The forecasts also revealed that, even if a host country such as Pakistan remains politically stable, the level of FDI stock shows the same trend as in the BC and MP case scenarios. The forecasts of the level of FDI stock show the effects of the WC scenario for the socio-economic factors.

The sensitivity analysis and the forecasts also lead to an assumption that the indication of international geographical and political factors might also be playing a major role in the flow of FDI to a country like Pakistan with such a turbulent economic and political environment.

While looking at the forecasting results (Table-7.4, 7.5, 7.6), it can be analyzed that many challenges exist for Pakistan to allow it to benefit from globalization and become integrated into the world economy. One of the challenges is to attract more FDI to reap the benefits of international capital flows. These benefits include improved technical knowledge and skill, access to external markets and increased employment.

In the critical analysis of data on FDI flows and stock, Pakistan did not do as well during the time frame 1970-2004 as other countries in the South Asian region like India, Bangladesh, and Sri Lanka. The other regional countries have improved their share of the South Asian FDI stock while Pakistan's share has declined (Table-2.8).

Policy changes and improvements are needed in Pakistan, spurring improvements in economic stability, controlling the inflation rate and the exchange rate, promoting more liberal trade policies, facilitating foreign investors, encouraging privatization and, most importantly, improving the law and order situation in order to provide more security for foreign investors. More political stability is required to defuse misunderstandings and give more property rights to investors.

Due to the broad field of study of FDI, the opportunities for the future work with respect to this study are considerable. Possible future research has been identified, including:

(i) After finding a long-run effect of PR on FDI stock, the next field of research might examine the relationship between the rate of return on FDI and FDI stock using more macro-economic determinants such as the availability of skilled labour, the quality of the infrastructure and wage costs.

(ii) If the discount rate and interest rate (given by banks on deposits) is reduced to zero according to the Islamic Financial system, the theoretical prediction that FDI flows will increase but FDI stock will decrease seems highly likely. In the context of the recent decision by the Supreme Court of Pakistan (1999) to Islamize the economy of Pakistan according to the rules set up by the Islamic Economic System, the effect of the interest-free economy on the flows of FDI into the country and the FDI stock already in the country can be tested. The Supreme court of Pakistan had ordered Pakistan government to conform all banking and financial laws according to Islamic Sharia laws by end-2001 (BBC-1999). This decision though created a panic situation to the foreign investors but the still the government had time to work on the system as Pakistan already practises a liberal version of Islamic banking under which banks are not supposed to use the word "interest"[85].

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[85] http://news.bbc.co.uk/1/hi/world/south_asia/576435.stm

(iii) Due to the reverse decision by Supreme Court of Pakistan in 2002 (BBC-2002)[86], on the abolition of interest from economic and financial system of Pakistan, the government has got an opportunity for some breathing space to carry on with its policies to try to revive the country's faltering economy and to develop the banking and financial system gradually and bringing it fully in conferment of Islamic Financial laws. This gradual change towards an interest free economy will also not create a panic situation in the foreign investors already dealing in a conventional interest based system.

(iv) Utilizing the methodology of PR indexation, a research project on the risk analysis of developing countries in South Asia as compared to the Gulf Region would prove useful.

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[86] http://news.bbc.co.uk/2/hi/business/2062679.stm

Table-8.1

Economic Growth & Key Macro-economic Indicators Performance (1970-2004)[87]

Years	GDPR $ mill	GDPRC $	FDI $ mill	FDIS $ mill	OE $ mill	IR (i-π)	EXGR (Real)	PR	Pop (mill)
1970	16,635	268	12	238	0.69	3.03	29.93	52.5	62
1971	16,713	265	11	238	0.63	3.03	29.66	44.76	63
1972	16,849	259	9	247	0.45	1.03	53.09	78.7	65
1973	18,039	269	0.001	247	0.39	6.03	53.12	79.28	67
1974	18,678	271	2	198	0.4	6.53	45.76	80.77	69
1975	19,465	274	8	168	0.38	5.94	41.26	83.77	71
1976	20,468	280	2	153	0.39	5.57	40.83	81.76	73
1977	21,276	280	4	144	0.38	6.16	39.36	57.64	76
1978	22,989	295	8	140	0.38	5.82	39.94	67.17	78
1979	23,853	298	13	144	0.46	5.55	41.11	70.72	80
1980	26,289	317	13	146	0.45	5.16	41.73	67.48	83
1981	28,372	334	21	133	0.37	4.69	41.12	66.75	85
1982	30,227	347	11	116	0.34	6.15	49.24	63.74	87
1983	32,276	359	5	118	0.37	7.12	52.91	61.01	90
1984	33,910	369	8	103	0.37	3.42	55.7	58.98	92
1985	36,485	384	19	157	0.36	3.12	62	70.51	95
1986	38,492	397	14	183	0.37	2.90	63.74	74.01	97
1987	40,976	410	17	182	0.37	2.58	65.96	71.72	100
1988	44,100	428	23	155	0.33	1.90	65.31	65.67	103
1989	46,288	441	24	162	0.35	1.20	72.38	66.21	105
1990	48,351	448	19	152	0.33	-2.17	73.96	61.89	108
1991	50,988	459	24	197	0.34	-0.60	75.59	68.74	111
1992	54,983	482	34	271	0.38	0.20	75	67.97	114
1993	56,036	471	31	225	0.41	-1.30	78.78	66.21	119
1994	58,219	481	33	298	0.37	2.00	78.24	66.7	121
1995	61,200	494	68	514	0.36	6.20	74.04	63.7	124
1996	64,266	506	80	595	0.36	8.20	78.75	61.92	127
1997	65,054	500	77	1184	0.35	10.20	82.42	67.71	130
1998	67,201	505	66	1622	0.28	10.80	86.43	65.96	133
1999	69,821	510	131	1995	0.25	9.40	93.14	63.47	137
2000	71,357	510	73	1571	0.24	8.60	100	62.91	140
2001	73,783	516	139	1582	0.28	6.50	115.1	63.92	143
2002	77,546	528	257	2051	0.29	4.40	109.24	68.95	147
2003	82,509	550	207	1687	0.34	2.90	104.9	71.23	150
2004	89,440	588	164	884	0.34	-1.80	101.13	69.98	152

Y=GDP real; YC=GDP per capita; I=FDI flows (real); IS= FDI stock (real); OE= (Exports + Imports)/GDP;
IR=Pak Disc. Rate- Inflation Rate; EXGR= Exchange rate (real); PR= Political Risk Index; Pop=Population (mill)

[87] Source: Federal Bureau of Statistics Pakistan, Economic Surveys of Pakistan (1970-2005), Ministry of Finance Pakistan, Board of investment Pakistan, World Bank CD-ROM (2005), IFS (1970-2004) by IMF, WIR (2000-05) by UNCTAD, and World watch Global Trends.

Appendix-1.1

Introduction to Political Economy of Pakistan

Pakistan appeared in the world map as a second largest independent Muslim State in 1947 with an estimated population of 150 million, with Eastern and Western wings named East Pakistan and West Pakistan. Today it is an Islamic republic, with domination of Islamic standards in the national political discourse, discussions about democratisation, economic reform, and state-society relations.

Despite the opposition of the most prominent Muslim thinkers like Abul-Kalam Azad (d. 1958) and religious institutions such as the Jam'iat Ulama-i Hind (Indian Ulama Party), who participated in the independence movement under the leadership of the Indian Congress Party, but on the other hand large majority of political elite joined the intellectuals such as Muhammad Iqbal (d. 1938) and politicians such as Muhammad Ali Jinnah (d. 1948) in the Muslim League. They prominent Muslim thinkers believed that the major issue is to get freedom from British and thought it better to live as a minority in a predominantly Hindu state and to seek to safeguard for Muslim communal interests before an uncertain future.

Though religion being the dominant slogan in the freedom movement, still for the leaders of the Pakistan movement Muslim nationalism was not so much a religious notion. Jinnah being of secular thinking wanted to identify Muslims as a people belonging to a distinct cultural group and sharing a common identity separate from that of the majority population. He did not think Islam as the basic religion of Pakistan but still wanted the identity of Muslim's aspirations and wanted Pakistan to be a secular state. Despite these thinking he was not able to keep Pakistan a secular state because of the strong impact of Islamic symbols in the separatist struggle during the last phase compelled him to change his ideology from secular to pure Islamic state which opened the door to thinking of Pakistan as an Islamic State.

After Pakistan the creation of Pakistan, the political elite with secular ideology resisted giving Islam a prominent role in national politics. Despite Islam being the major slogan of freedom movement to create a Islamic brotherhood for the Muslim homeland confronted with insurmountable ethnic, linguistic, and class conflicts, economic

collapse, a serious refugee problem, and war with India quickly succumbed to the temptation of mobilising Islamic symbols in the service of state formation. Due to these problems in the early stages of freedom, the country was destabilised and the governments failed to address fundamental socio-economic issues, even carried out meaningful land reforms, but the ethnic issues and provincials freedom demands compelled government to consolidate power in the centre.

After a great resistance of the secular political elite to form an Islamic status of the newly created state, the religious parties found a door for Islamic practices in politics by 1949 as the secular political elite accepted a political role for Islamic forces. The debate for the Islamisation of Pakistan constitution was included in the Objectives Resolution. So the first decade of independence Islamic forces got up to some how involved in the politics of Pakistan which changed the political environment in the country after culmination of the 1956 constitution. But still the secular political elite wanted the hold of politics and was not willing to abandon the secularism or to Islamise the society and politics as a whole. The anti-Ahmadiya movement in 1953-54 and removal of Ahmadi foreign minister from the government pressurised the government to commit himself for the Islamisation. Despite strong reaction by the government against the religious parties and imposed the martial law in the country abandoning the basic rights, the government had to include formally to some form of Islamicness of Pakistan in the constitution of 1956, declaring the state an Islamic republic, still the Islamic forces once again demanded adoption of Islamic laws and precepts.

After the military coup in 1958, General Ayub Khan assumed powers (1958-69), and tried to use his military force to resolve the issue of Islamic parties by nationalising the Islamic institutions and imposing the cotrovertial secular family laws and also removed " Islamic" from the name of state in the constitution of 1962. He tried to use his paid Ulema to define Islam in the modern way by including the secular thinking and teachings in the interpretations, which increased more tension between Ayub Khan's government and the religious parties and resulted as the downfall of Ayub Khan's self-made empire. Soon after the downfall of Ayub Khan, the movement for independent state in East Pakistan gave way to a civil war in 1971, which resulted to an end after

creation of independent state called Bangladesh. The religious parties condemned the military government of it's policies and secularism thinking for the fall of East Pakistan.

In the decades after 1970s, the religious parties gained ground in the politics through the student unions, labour unions and professional associations. This built up a pressure for the new political government headed by Prime Minister Zulfika Ali Bhutto (1971-77), eventually accepted the demands by the Islamic parties and declared Ahmedis a non-Muslim minority in 1974 and also banned the use of Alcohol, closed casinos and night-clubs, and prohibited gambling and all other social activities proscribed by Islamic law. He thought that by accepting the demands of the religious parties he will be able to govern for long time but the political agitation against the rigging in the general election of 1977 ended his power to another military coup lead by General Zia-ul-Haq (1977-1988). Being a devoted Muslim, Zia understood the power of Islamic parties and harnessed them to protect the supreme position of the state. Due to the Islamic attitude of the government, the bureaucracy and the military became more Islamic openly to initiate the Islamisation of the whole system of Pakistan with a gradual change from 1979-1984.

Zia period is considered as the major player in the Islamisation of the legal and economic system of Pakistan as most of the reforms like introduction of Islamic panel, commercial and inheritance laws, religious taxes (Zakat and Usher), the institution of Federal Shari'at Court to review the compatibility of all laws with Islamic dictums and initiating public to appear as a true Muslim e.g. women dressing etc. This was also enforced by the role of Zia government in Afghanistan Jihad against the Russian invasion in 1984.

Despite all these activities in favour of the Islamic political parties, the government still remained reserved in using the pure Islamic Economic System to be practices in legal and financial system. It kept running the conventional economic system in parallel to the Islamic laws, which created a gap between the Islamic movements and Zia government. Due to commitment of Zia government with Islamic Parties, it provided a strong base to the Islamic status of Pakistan and even after the death of Zia in a plane crash in 1988, the predecessor governments could not keep themselves away from this

effect, and had to coop with the religious parties. Though the secular political elite ruled the country during Benazir and Nawaz Sharif governments, the historical decision was made by the Supreme Court of Pakistan in 1999 to fully change the system of the government and economy according to Islamic Sharia Laws by July-2000. This deadline was extended till July-2001 by the request of another military ruled government lead by General Pervaiz Musharaf. Due to the political situation in the region after the terrorist attacks on USA on September 11th, 2001, the process of Islamisation of economy had to be postponed till further representation of Shari 'at bill by the Federal Shari 'at Court to the Supreme Court of Pakistan but not abandoned.

Appendix-1.2

Introduction to Principles of Islamic Economics

Islam being a complete code of life, it should be implemented in every aspect of our life and Economic System. Islamic Economics with quite simple and straightforward basic principles based on solid principles brought forth by the Koran and the Sunna, it represents an independent and alternative economic system to the world today. Though Islamic banking is a quite new phenomenon with an historical background of only 20-30 years but the main paradigm of Islamic economy history goes back over to 1400 years. Due its is very old historical background, the Islamic Economics is considered as a non-western economic system. Islamic economic block is considered as one of the biggest economic blocks in 900 AD, its boundaries were spreaded from Morocco to China.

Islamic Economics is considered as an integral part of social life, which can be defined as caring of others with actual meaning of economics in human relationship. Care for others as institution of Waqf (charitable endowments) in opposition to individualism or self interest, morality, ethical actions, human behaviour in production, consumption and in exchange of goods are considered as the heart of Islamic economic culture.

By laying down certain principles for the economic activity of man, Islam does not bind the methods and techniques in practising of the above said rules. The major concern in the Islamic law is the similarity of the underlying principles. As it is a universal truth that Allah the all Mighty is the only creator of human being, so it is the basic right of the human being in sharing the wealth of the world. I slam does not allow the monopoly in the economic system but asks for equal opportunities to every kind of human being of either race, class or group.

Every human being has equal rights to benefit from the benefits according to his needs from the fruits, jungles, and minerals. A monopolistic possession of the creation of Allah is not right, and keeps the things in idle and useless. This is the basic principle in Islam in which the basic right of ownership is originated in the world. Islam does not allow the principles of economic system, which do not abide by the Shari 'a principles of property rights. In an Islamic economic system it is duty of the state government to

protect the legal rights of individuals' along with compelling them to fulfil the obligations set by Shari 'a for better social system.

Islamic Shari 'a laws have asked the wealthy Muslims to give Zakat from their wealth every year to help the needy individuals to create an atmosphere of equality and social justice in the society. In moral teachings of Islam, the paying of Zakat creates the feeling of mutual love and affection between the rich and the poor. Islam has commended Zakat at the rate of two and a half percent per annum on the total accumulated wealth [of each individual] in the country, as well as on invested capital; five percent or ten percent, depending on the method of watering, should be collected on agricultural produce; and twenty percent on certain mineral products. A specific rate on cattle exceeding the allowed number is levied to Zakat.

According to Syed Maududi (1948) "this system provided a means of social insurance where by everyone in an Islamic society is provided with at least the necessities of life. No worker can ever be forced, through fear of starvation, to accept conditions of employment, which may be unfairly imposed on him by employer."

The five major Islamic economic and financial instruments as elaborated by Choudhry (1997) are, (1) abolition of interest, (2) profit-sharing under economic co-operation between labour and capital, (3) joint ventures, principally though not wholly through equity participation; (4) the institution of charity; (5) avoidance of wasteful use of resources.

Appendix-1.3

Introduction to Political Economy of Islam

The basic principles of Islamic Economics are the just distribution of resources according to the devine rules and laws given by Qur'an and Sunnah. The concept of social justice in the political economy of Islam is the precinct of the political economy of any economic system either conventional or Islamic economic system. Qur'an and Sunnah along with the necessity of social justice, also emphasises the central importance of protection of property rights (Haq-al-Mal) and market value highly valued by ethics and morality under the political economy of Islam. The concept of a highly powerful social regulatory body called Al-Hasiba to work under the strict Shari'a law is emphasised also to protect the general public from any unjust decisions. The reason for such powerful law enforcement body is for the protection of the weak, needy, old or young and the unprivileged.

By this introduction, one can easily define the basic principles of Islamic political economy in the light of Unity precept of God (i.e. Oness of God as elaborated by Qur'an and Sunnah of the Holy Prophet (mpbuh)), the social justice, the property rights (of which work and property are parts). To serve the humanity according to the basic and fundamental principles set in the political economy of Islam, the moral and economic concept as given by the Sharia laws for the prohibition of interest in any type and form or quantity is unanimously agreed upon by all of the Islamic economists. The implementation and practice of profit-loss sharing laws at all levels of political economy of Islam can be through the basic instruments of investment e.g. Musharka and Mudaraba. As the prayers has been made obligatory for all adult Muslim men or women, the paying of Zakat has also been made obligatory and considered as the second pillar of Islamic jurisprudence. In Qur'an Allah has asked all the wealthy Muslims to pay Zakat from their wealth as a religious tax to purify their wealth to help the needy and poor being pushed to live under or on the poverty line. The distribution of Zakat under the political economy of Islam is managed by an institution called Bait-al-Mal (the public treasury) and the other taxes are reduced if this institution is managed well under political economy of Islam.

As in the political economy the enhanced spending is considered as the major economic activity of a state, the elimination of interest and its replacement by Musharka and Mudaraba modes of investment alongwith the induction of Zakat will attribute a great deal of solidarity and goodwill for human being.

In the political economy of Islam, Qur'an has emphatically prohibited wasteful consumption and production (Israf) establishing the minimal number of instruments needed for the Islamic political economy and also other instruments like mark-up in foreign trade financing (Murabaha), rental (Ijara), leasing (Ba'y Muajjal), interest-free loans (Qard- e-Hassanah), endowments (Waqf), a range of Shari'ah prescribed secondary market instruments, etc., can be added to the minimal list of instruments of the political economy of Islam.

These instruments are linked to each other along with the principles of political economy of Islam to provide justice and welfare to humanity for the achievement of social objective.

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